SONY®

VIDEOCASSETTE PLAYER

BVU-900

Professional U-matic SP

MAINTENANCE MANUAL

Volume 2 1st Edition

Serial No.10001 and Higher

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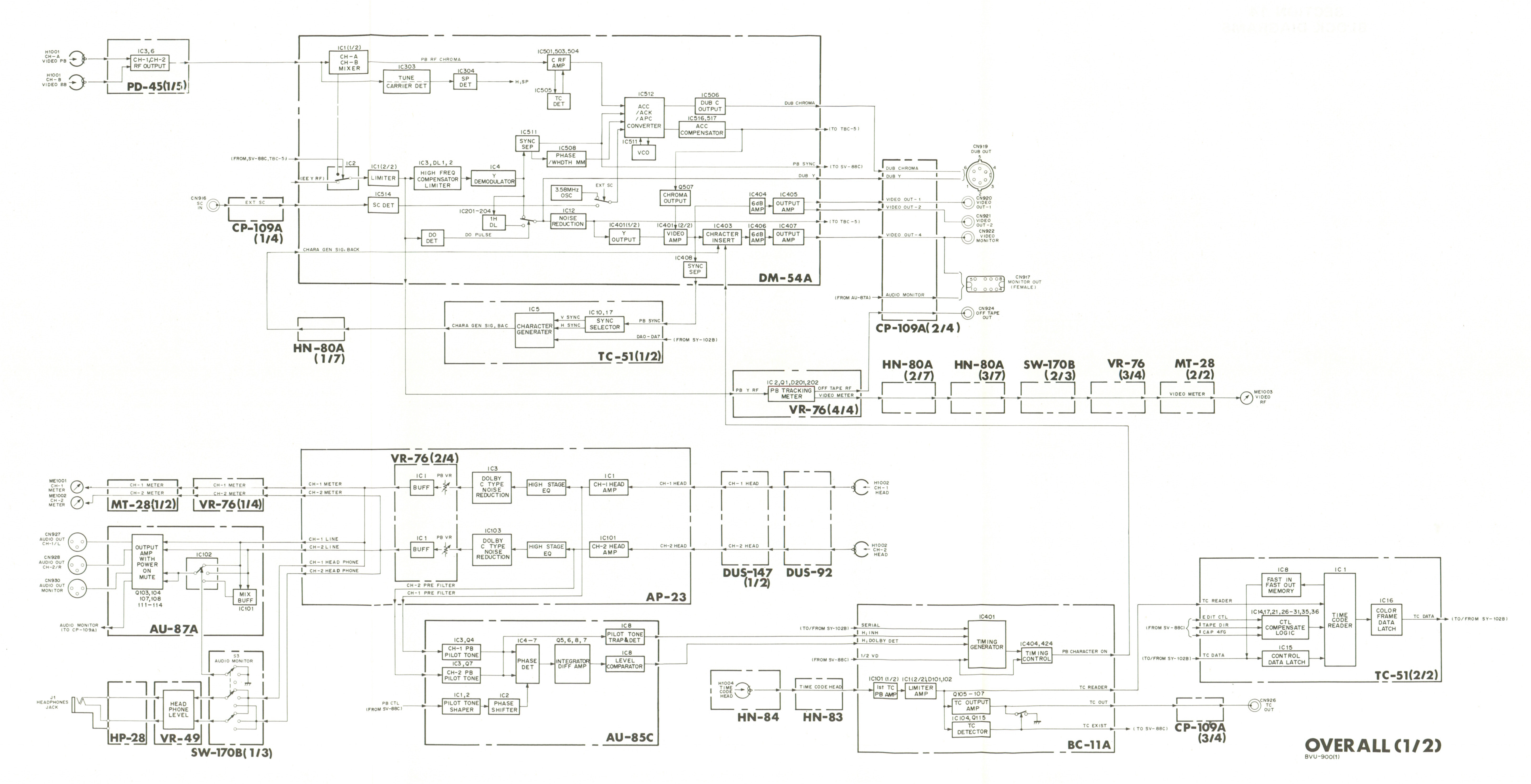
Warning—This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a computing device pursuant to Subpart J of Part 15 of FCC Rules.

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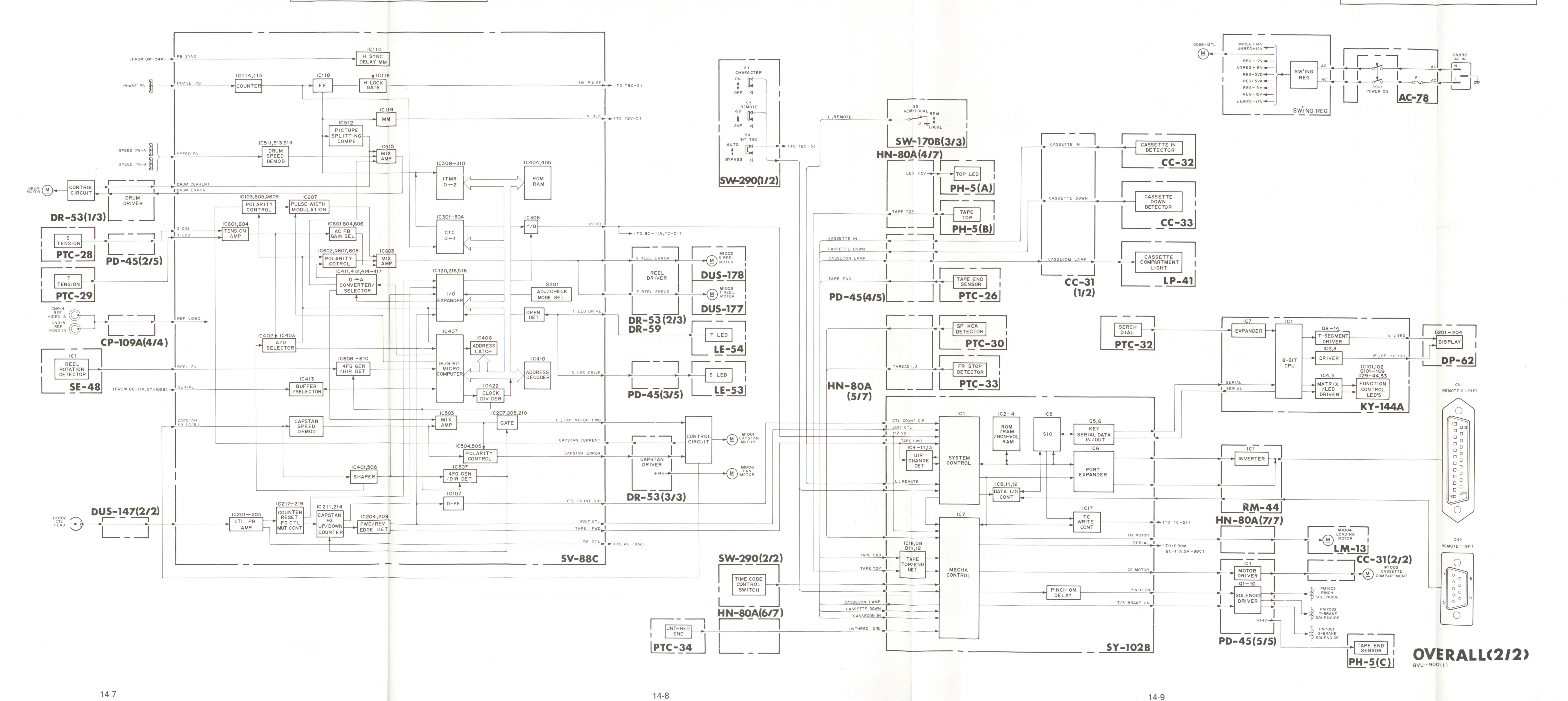
SECTION 14
BLOCK DIAGRAMS

OVERALL(1/2)


PD-45(1/5)
DM-54A
CP-109A (1/4)
CP-109A(2/4)
HN-80A (1/7)
TC-51(1/2)
VR-76(4/4)
HN-80A (2/7)
HN-80A (3/7)
SW-170B (2/3)
VR-76 (3/4)
MT-28 (2/2)
MT-28(1/2)
VR-76(1/4)
VR-76(2/4)
AU-87A
AP-23
DUS-147 (1/2)
DUS-92
AU-85C
HP-28
VR-49
SW-170B(1/3)
HN-84
HN-83
BC-11A
CP-109A (3/4)
TC-51(2/2)
OVERALL (1/2)
BVU-900(1)

OVERALL(2/2) OVERALL(2/2)


OVERALL(2/2) OVERALL(2/2)



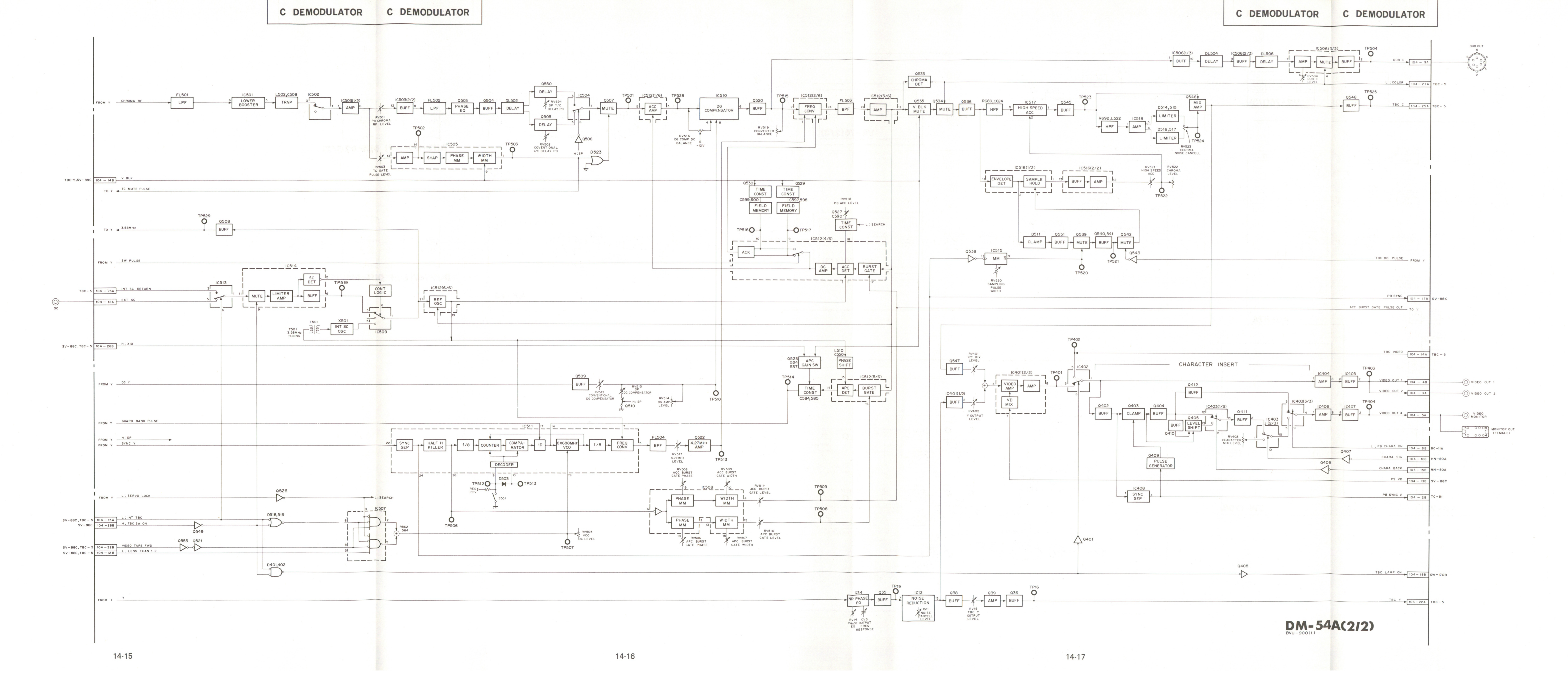
OVERALL(2/2)

BVU-900(1)

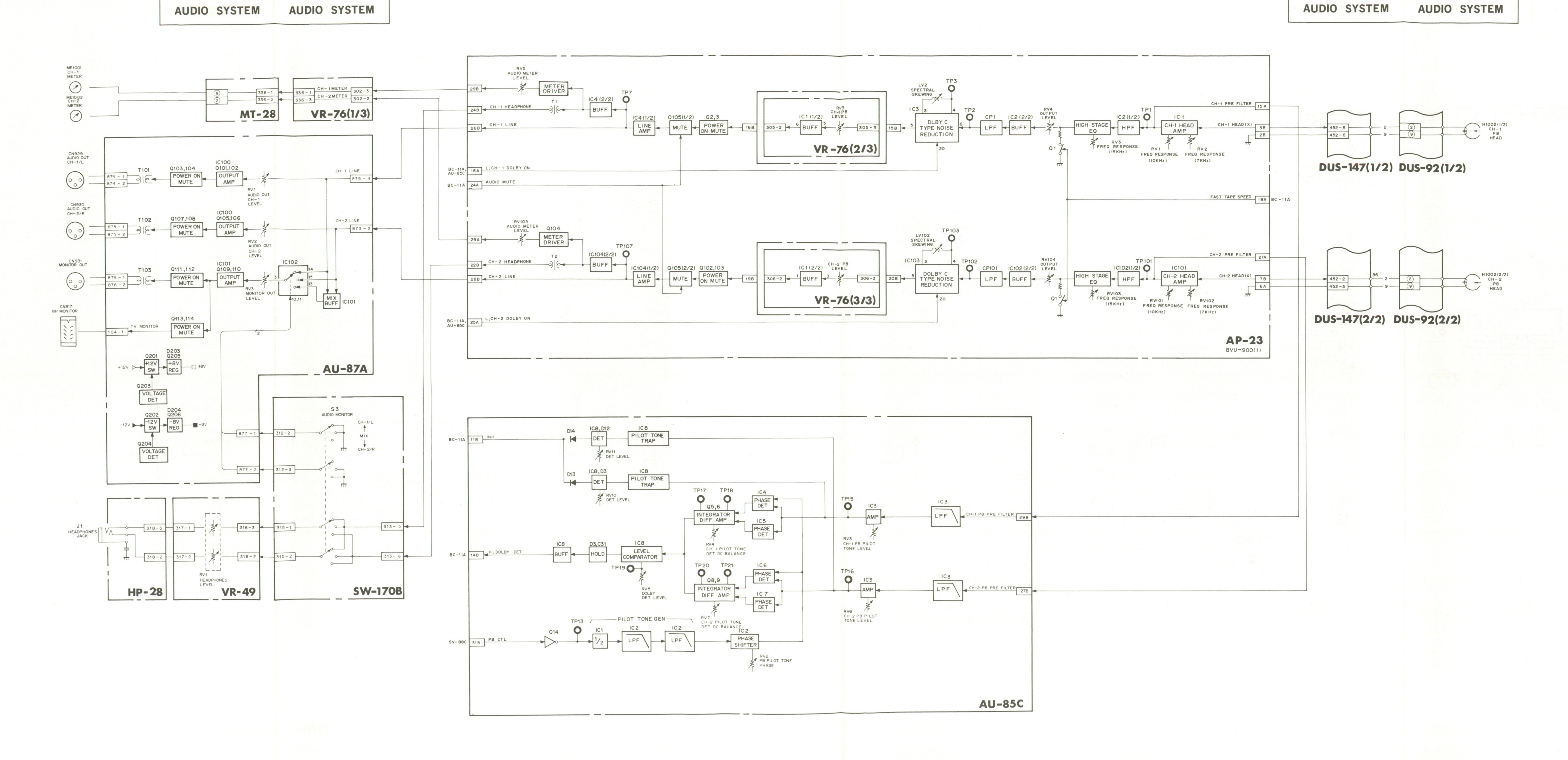
Y DEMODULATOR/PB RF



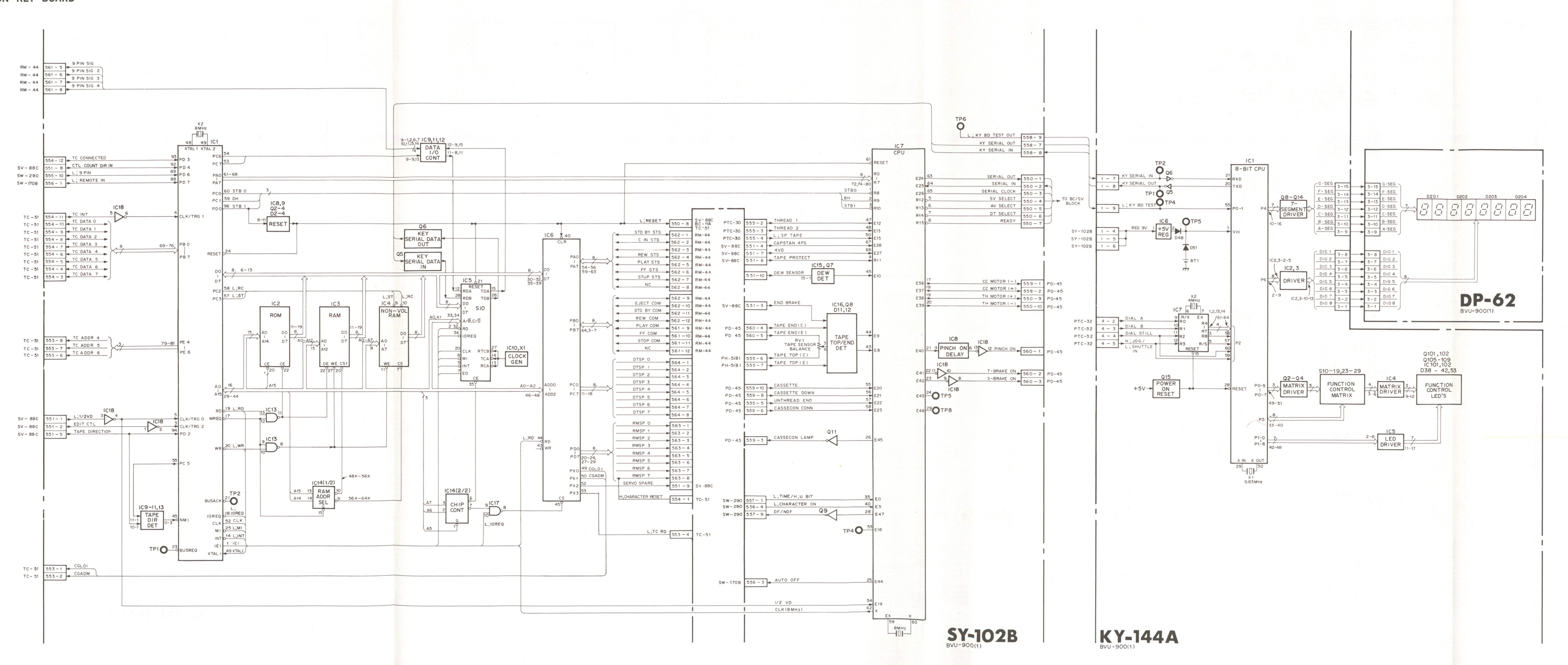
C DEOMODULATOR



AUDIO SYSTEM



SYSTEM CONTROL/FUNCTION KEY BOARD



SV-88C(1/2)

BVU-900(1)

SV-88C(2/2)

BVU-900(1)

IC401 TIMING GENERATOR

TIMING CONTROL IC404 LATCH

TC HEAD

IC101(1/2) 1st TC PB AMP

RV101 TC PB LEVEL

LIMITER AMP

IC101(2/2) 2nd TC PB AMP

D101,102 LIMITER

Q111 BUFFER

TC READER

Q105-107 TC OUTPUT AMP

TC OUT

IC114(1/2) Q115 TC DETECTOR

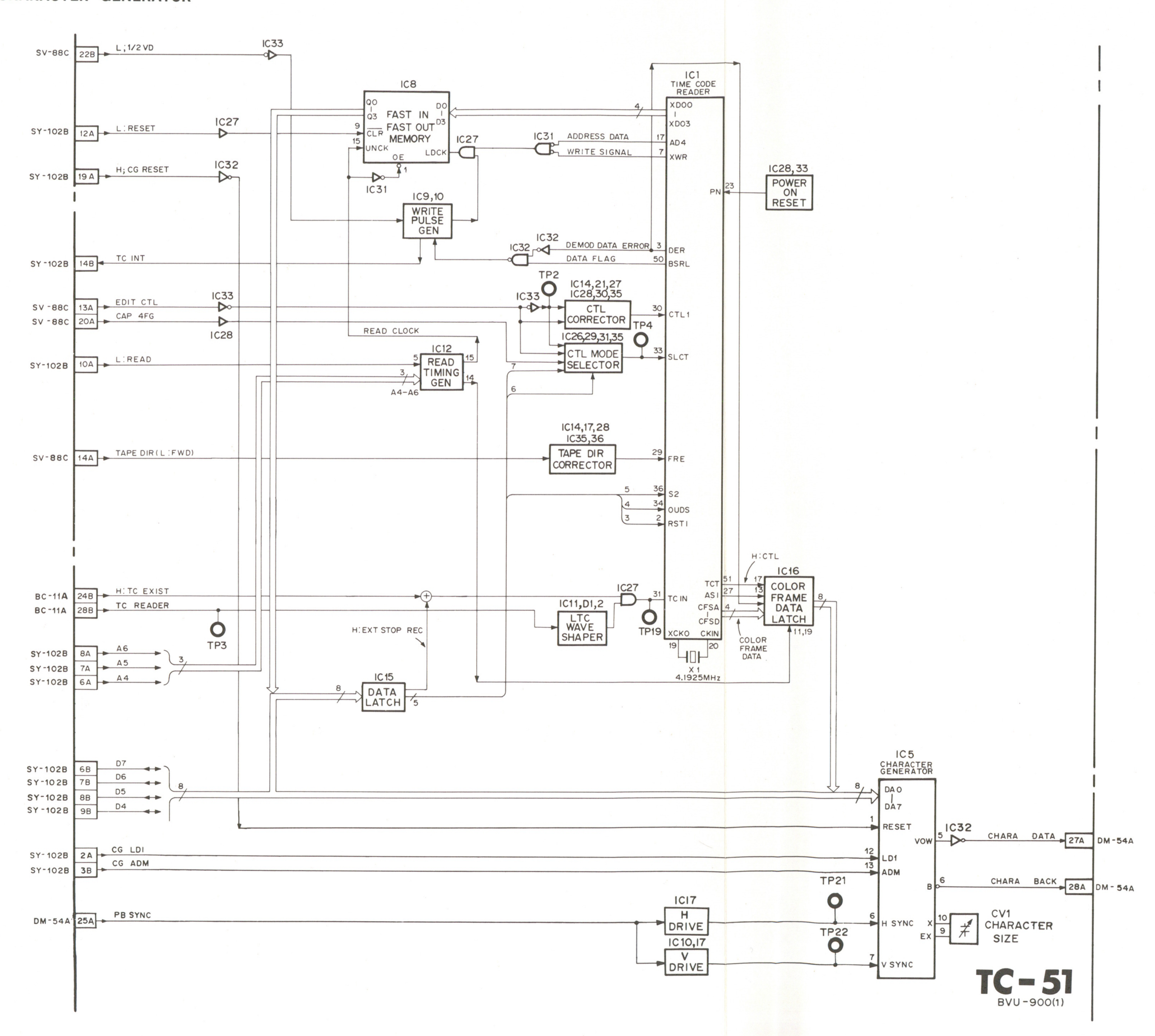
IC104(2/2) TC BUFFER

H:TC EXIST

Q108 RESET DELAY

BC-11A
BVU-900(1)

TIME CODE/CHARACTER GENERATOR

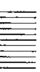


SECTION 15
SEMICONDUCTOR ELECTRODES

ここに記載されている IC, トランジスタ, ダイオードは, それぞれの機能を等価的に表わしたものです。したがって互換性を表わすものではありません。(互換性のない型名が併記されている事もあります。)部品の交換をする時は, SPARE PARTS の章を参照して下さい。

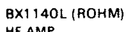
ICs, transistors and diodes whoses functions are equivalent are described here. Therefore, incompatible device names may be described together. For parts replacement, refer to the Spare Parts section in this manual.

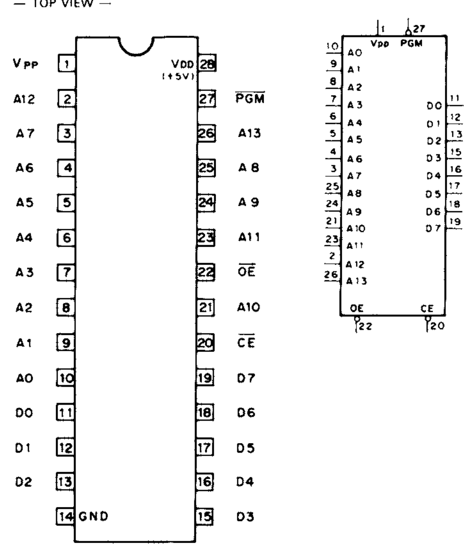
等価回路は IC メーカーの Data Book に従いました。
The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

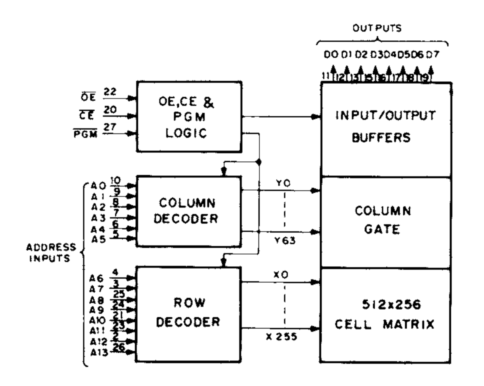




27128-25 (INTEL) (ACCESS TIME 250 nS)
N-MOS UV EPROM 128K-BIT (16384x8)
— TOP VIEW —



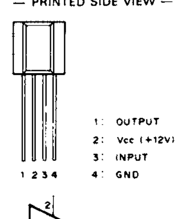




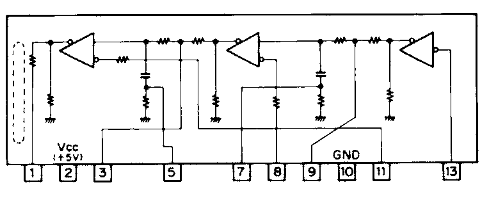
TERMINAL / MODE	CE	OE	PGM	VPP	Vcc	OUTPUTS
READ	0	0	1	+5V	+5V	DATA OUT
STANDBY	1	X	X	+5V	+5V	HIGH IMPEDANCE
PROGRAMMING	0	1	0	+21V	+21V	DATA IN
PROGRAM VERIFY	0	0	1	+21V	+5V	DATA OUT
PROGRAM INHIBIT	1	X	X	+21V	+5V	HIGH IMPEDANCE
HIGH SPEED PROGRAMMING	0	1	0	+21V	+6V	DATA IN

1 ; TTL LEVEL HIGH VOLTAGE IN
0 ; TTL LEVEL LOW VOLTAGE IN
X ; DON'T CARE (1 OR 0)

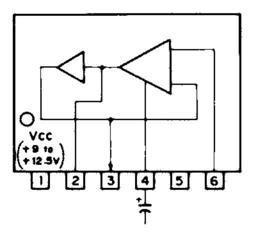
AN608P (MATSUSHITA)
WIDE BAND AMPLIFIER
— PRINTED SIDE VIEW —



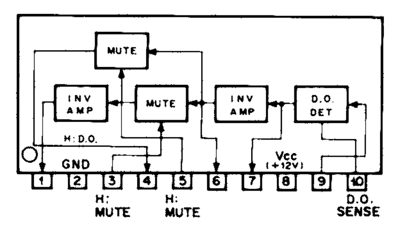
BX1140L (ROHM)
HF AMP
— REAR VIEW —



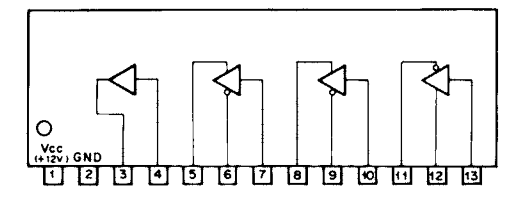
BX1247L (ROHM)
LOWER FREQUENCY BOOSTER AMPLIFIER
— PRINTED SIDE VIEW —



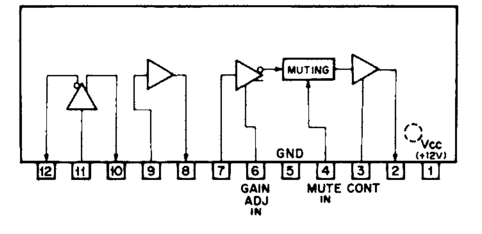
BX1248L (ROHM)
DROPOUT DETECTOR
— PRINTED SIDE VIEW —



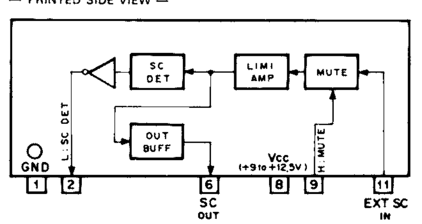
BX1249L (ROHM)
VIDEO PHASE EQUALIZER
— PRINTED SIDE VIEW —



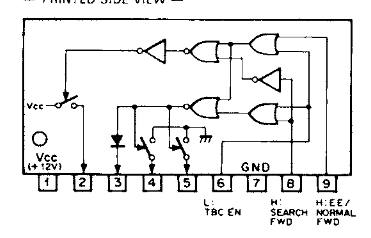
BX1250L (ROHM)
CHROMA OUTPUT AMPLIFIER
— REAR VIEW —



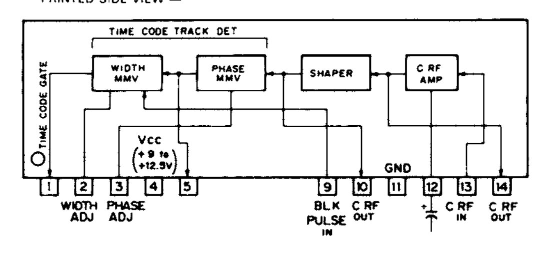
BX1251L (ROHM)
EXTERNAL SUBCARRIER AMPLIFIER
— PRINTED SIDE VIEW —



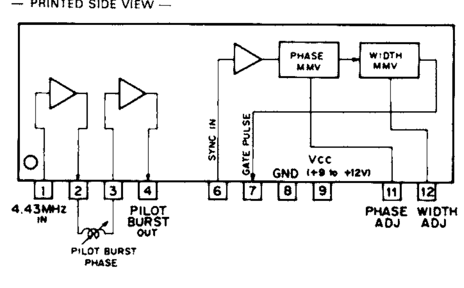
BX1252AL (ROHM)
TBC SEARCH/STILL VCO SHIFT SWITCH
— PRINTED SIDE VIEW —



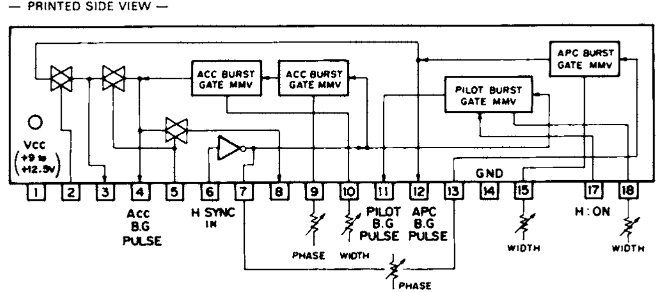
BX1258L (ROHM)
TIME CODE MUTE GENERATOR
— PRINTED SIDE VIEW —



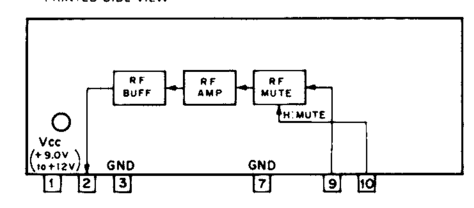
BX1262L (ROHM)
PILOT BURST INSERTER
— PRINTED SIDE VIEW —



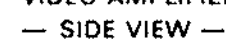
BX1264L (ROHM)
ACC/APC BURST GATE PULSE GENERATOR
— PRINTED SIDE VIEW —

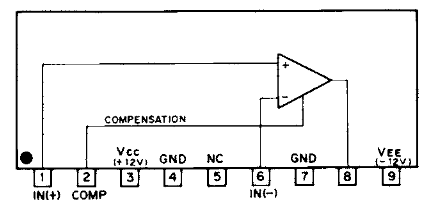


BX1265L (ROHM)
VIDEO HEAD AMPLIFIER/MUTING
— PRINTED SIDE VIEW —

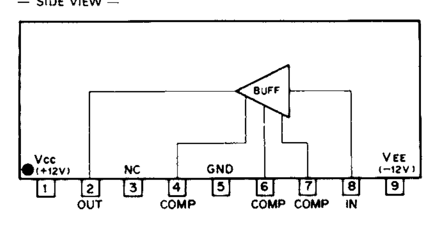


BX365AL (ROHM)
VIDEO AMPLIFIER
— SIDE VIEW —

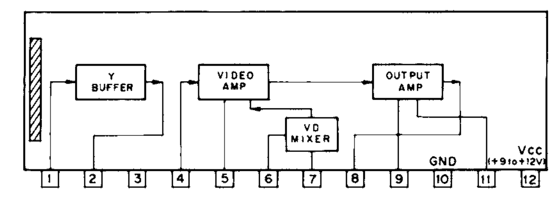




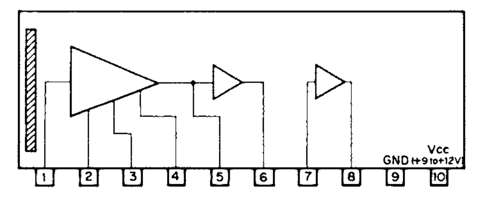
BX366AL (ROHM)
VIDEO BUFFER
— SIDE VIEW —



BX388L (ROHM)
VIDEO AMP/VD MIXER
— PRINTED SIDE —

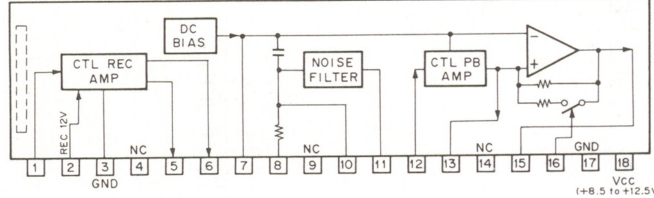


BX389L (ROHM)
VIDEO AMPLIFIER
— PRINTED SIDE —





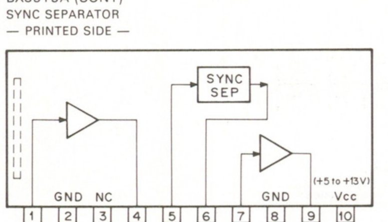
BX3914 (SONY)
CTL REC/PB AMPLIFIER
— PRINTED SIDE —

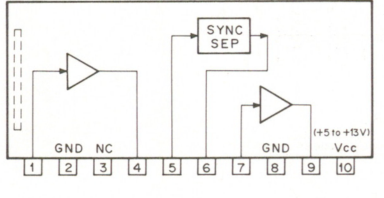


CX134A (SONY)
HEAD AMP/DROPOUT COMPENSATOR
— TOP VIEW —

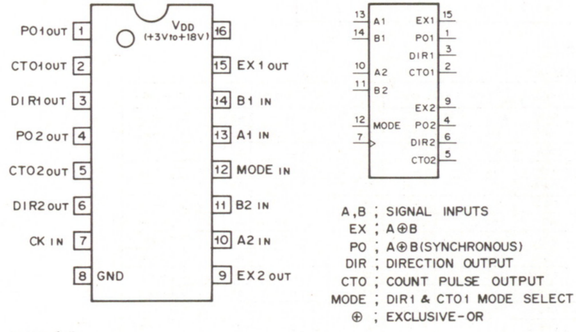
FIN GND
Vcc(+12V)
PRE AMP
RF AMP
BIAS
PRE AMP
RF AMP
DROPOUT DET
LIMITER
LIMITER
RF AMP
GND
Vcc (+12V)

BX3915A (SONY)
SYNC SEPARATOR
— PRINTED SIDE —





CX23028 (SONY)
C-MOS SYNCHRONOUS ROTATIONAL DIRECTION DETECTOR
— TOP VIEW —



A,B ; SIGNAL INPUTS
EX ; A⊕B
PO ; A⊕B (SYNCHRONOUS)
DIR ; DIRECTION OUTPUT
CTO ; COUNT PULSE OUTPUT
MODE ; DIR1 & CTO1 MODE SELECT
⊕ ; EXCLUSIVE-OR

MODE = "1"

DIRECTION OUTPUT "DIR"

INPUTS	DIR
A∠B	1
B∠A	0

TIMING CHART "CTO"

CK
A
B
PO
CTO

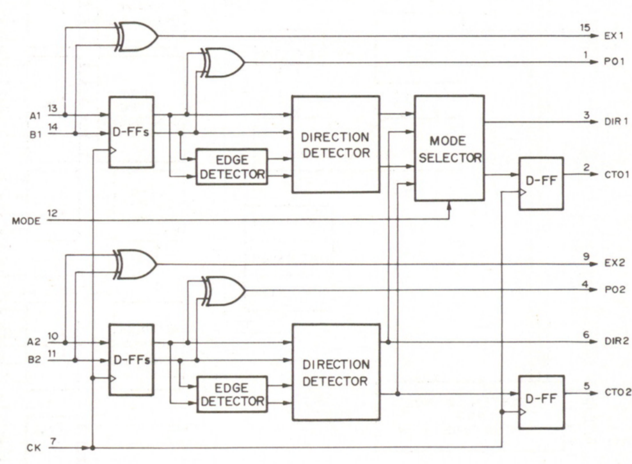
MODE = "0"

DIRECTION OUTPUT "DIR"

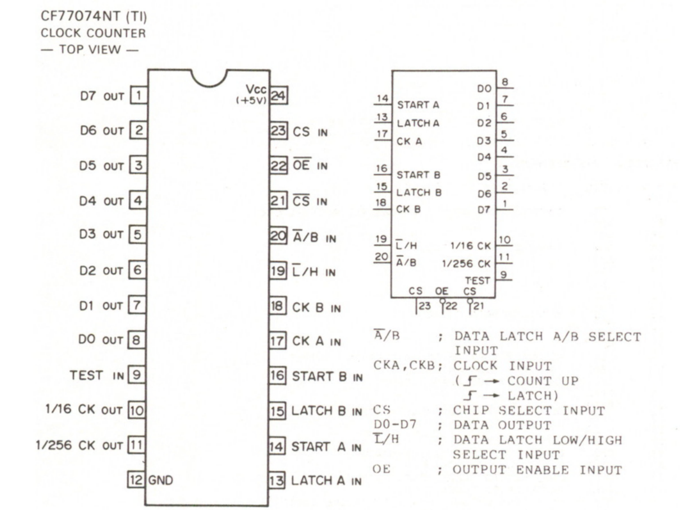
INPUTS		DIR 1	DIR 2
CH1	CH2		
A1∠B1	A2∠B2	1	THE SAME FUNCTION OF MODE "1"
B1∠A1	A2∠B2	OUTPUT "1" AND "0" ALTERNATELY	
A1∠B1	B2∠A2		
B1∠A1	B2∠A2	0	

CTO 1 ; CTO 1 with MODE "0" = CTO 1 with MODE "1" + CTO 2
CTO 2 ; THE SAME FUNCTION OF MODE "1"

1 ; HIGH LEVEL
0 ; LOW LEVEL
A∠B ; THE PHASE OF SIGNAL A IS IN ADVANCE FOR THE PHASE OF B.



CF77074NT (TI)
CLOCK COUNTER
— TOP VIEW —

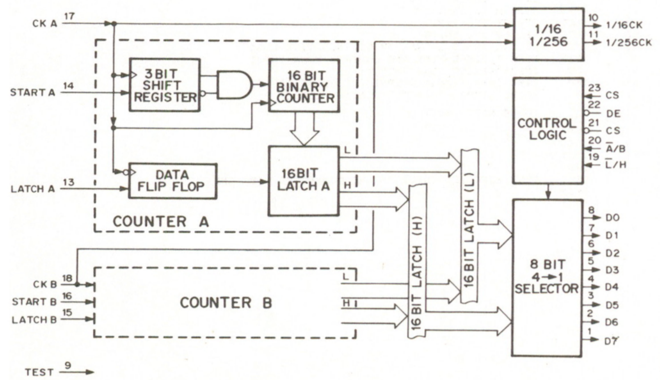


A/B ; DATA LATCH A/B SELECT INPUT
CKA, CKB ; CLOCK INPUT
(⎍ → COUNT UP
⎍ → LATCH)
CS ; CHIP SELECT INPUT
D0–D7 ; DATA OUTPUT
L/H ; DATA LATCH LOW/HIGH SELECT INPUT
OE ; OUTPUT ENABLE INPUT

MODE SELECT

INPUT					OUTPUT
CS	CS	OE	A/B	L/H	D0–D7
0	X	X	X	X	HI-Z
1	0	0	0	0	LATCH A LOW BYTE
1	0	0	0	1	LATCH A HIGH BYTE
1	0	0	1	0	LATCH B LOW BYTE
1	0	0	1	1	LATCH B HIGH BYTE
X	1	X	X	X	HI-Z
X	X	1	X	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE



CX7912A (SONY)
C-MOS TIME CODE READER
— TOP VIEW —

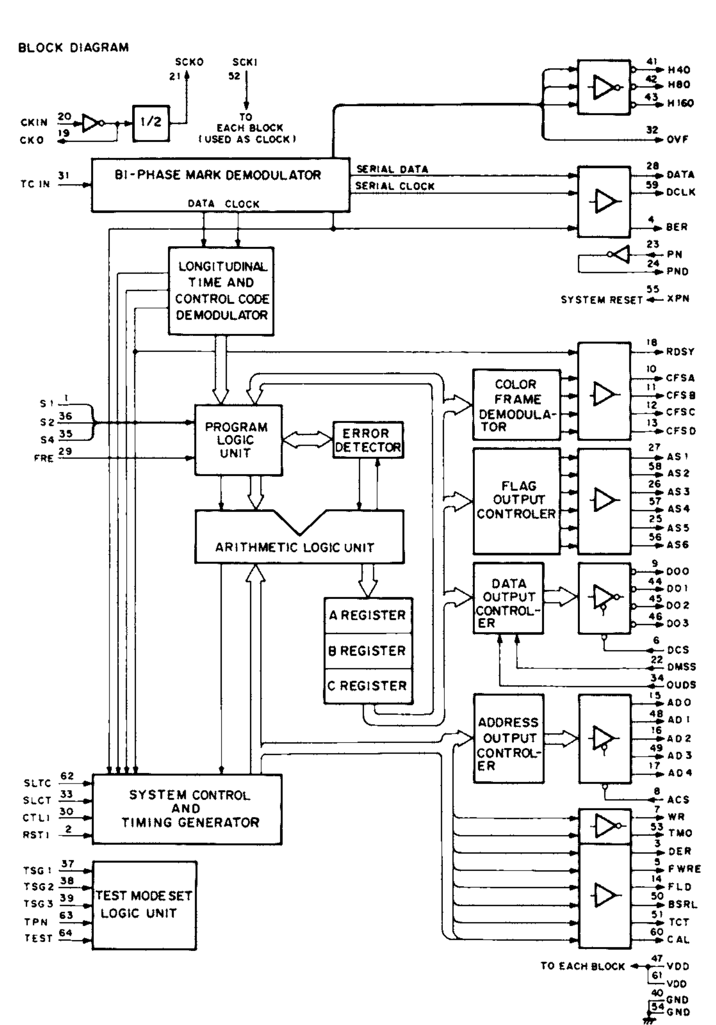
28	27	26	25	24	23	22	21	20	19
29	58	57	56	55	54	53	52	51	18
30	59							50	17
31	60							49	16
32	61							48	15
33	62							47	14
34	63							46	13
35	64							45	12
36	37	38	39	40	41	42	43	44	11
1	2	3	4	5	6	7	8	9	10

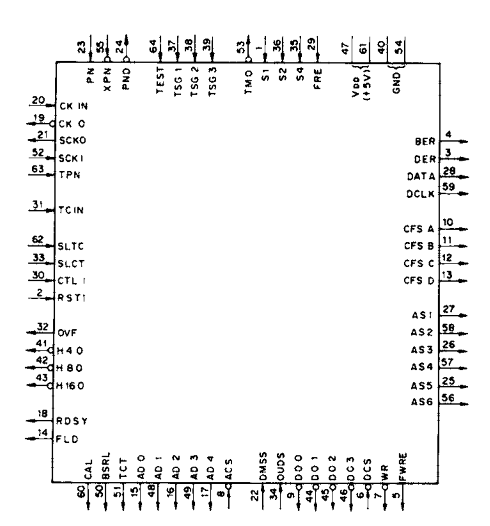
INDEX DOT

PIN ASSIGNMENT

PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1	O		S1	17		O	AD 4	33	O		SLCT	49		O	AD 3
2	O		RSTI	18		O	RDSY	34	O		OUDS	50		O	BSRL
3		O	DER	19		O	CK O	35	O		S4	51		O	TCT
4		O	BER	20	O		CK IN	36	O		S2	52	O		SCKI
5		O	FWRE	21		O	SCKO	37	O		TSG 1	53		O	TMO
6	O		DCS	22	O		DMSS	38	O		TSG 2	54		O	GND
7		O	WR	23	O		PN	39	O		TSG 3	55	O		XPN
8	O		ACS	24		O	PND	40		O	GND	56		O	AS6
9		O	DO 0	25		O	AS5	41		O	H 40	57		O	AS4
10		O	CFS A	26		O	AS3	42		O	H 80	58		O	AS2
11		O	CFS B	27		O	AS 1	43		O	H 16 0	59		O	DCLK
12		O	CFS C	28		O	DATA	44		O	DO 1	60		O	CAL
13		O	CFS D	29	O		FRE	45		O	DO 2	61	O		VDD(+5V)
14		O	FLD	30	O		CTL I	46		O	DO3	62	O		SLTC
15		O	AD 0	31	O		TC IN	47	O		VDD(+5V)	63	O		TPN
16		O	AD 2	32		O	OVF	48		O	AD 1	64	O		TEST

BLOCK DIAGRAM





MODE SELECT

SLCT	SLTC	MODE
0	0	AUTO
0	1	TIME CODE
1	0	CTL
1	1	AUTO

CTL COUNT

FRE	RSTI	COUNT
0	X	DOWN COUNT
1	X	UP COUNT
X	⌉_	RESET

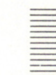
SIGNAL FORMAT SELECT

S4	S2	S1	FORMAT	FRAME
0	0	0	FILM	24
0	0	1	NOT ALLOWED	—
0	1	0		
0	1	1		
1	0	0	PAL, SECAM	25
1	0	1	NOT ALLOWED	—
1	1	0	NTSC (NON DROP FRAME)	30
1	1	1	NTSC (DROP FRAME)	30

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

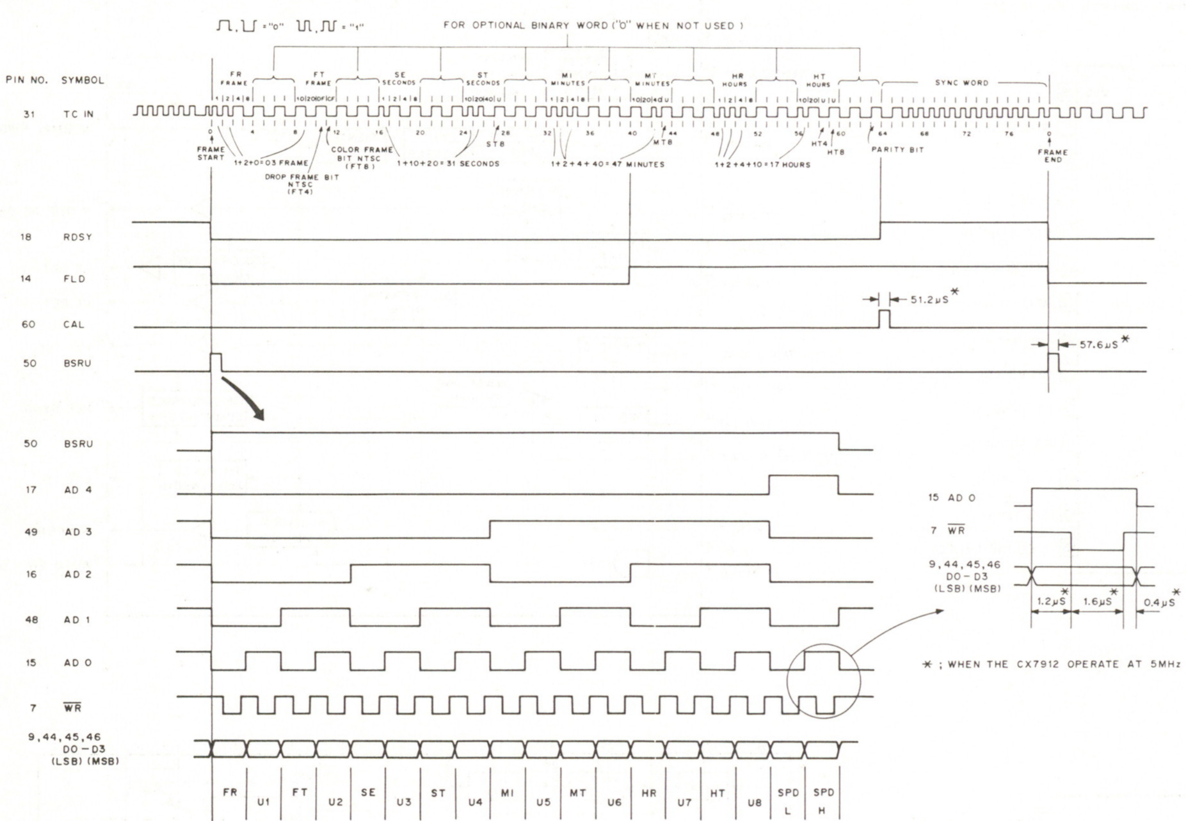
FUNCTIONAL PIN DEFINITION

Pin No.	SYMBOL	DESCRIPTION
8	ACS	ADDRESS LINE OUTPUT ENABLE (NEGATIVE-LOGIC)
15	AD0	ADDRESS DATA OUTPUT
48	AD1	
16	AD2	
49	AD3	
17	AD4	
27	AS1	PARALLEL DATA OUTPUT
58	AS2	
26	AS3	
57	AS4	
25	AS5	
56	AS6	
4	BER	BI-PHASE MARK ERROR (BIT ERROR) OUTPUT
50	BSRL	DATA OUT FLAG OUTPUT
60	CAL	CALCULATE OUT FLAG OUTPUT
10	CFSA	DEMODULATED COLOR FRAME OUTPUT
11	CFSB	
12	CFSC	
13	CFSD	
20	CKIN	CLOCK INPUT
19	CKO	CLOCK OUTPUT (NEGATIVE-LOGIC)
30	CTLI	CTL SIGNAL INPUT (⌉_)
28	DATA	DEMODULATED SERIAL DATA OUTPUT
59	DCLK	DEMODULATED CLOCK OUTPUT
6	DCS	DATA LINE OUTPUT ENABLE (NEGATIVE-LOGIC)
3	DER	DEMODULATE DATA ERROR OUTPUT
22	DMSS	ASSIGNED DATA SELECT
9	DO0	DATA OUTPUT (NEGATIVE-LOGIC)
44	DO1	
45	DO2	
46	DO3	
14	FLD	FIELD DATA OUTPUT
29	FRE	CTL DIRECTION SIGNAL INPUT
5	FWRE	DEMODULATE DIRECTION SIGNAL OUTPUT
41	H40	SPEED RANGE FLAG 4 OUTPUT (NEGATIVE-LOGIC)
42	H80	SPEED RANGE FLAG 8 OUTPUT (NEGATIVE-LOGIC)
43	H160	SPEED RANGE FLAG 16 OUTPUT (NEGATIVE-LOGIC)
34	OUDS	ERROR BYPASS ON/OFF SELECT
32	OVF	OVERFLOW FLAG OUTPUT
23	PN	POWER ON SIGNAL INPUT
24	PND	POWER ON SIGNAL OUPUT (NEGATIVE-LOGIC)
18	RDSY	READ SYNC WORD DATA OUTPUT
2	RSTI	CTL TIMER RESET INPUT (⌉_)
1	S1	SIGNAL FORMAT SELECT S1
36	S2	SIGNAL FORMAT SELECT S2
35	S4	SIGNAL FORMAT SELECT S4
52	SCKI	SYSTEM CLOCK INPUT
21	SCKO	SYSTEM CLOCK OUTPUT
33	SLCT	SELECT CTL INPUT
62	SLTC	SELECT LTC INPUT
55	XPN	SYSTEM RESET SIGNAL INPUT (NEGATIVE-LOGIC)
31	TCIN	LONGITUDINAL TIME AND CONTROL CODE INPUT
51	TCT	INPUT SELECT FLAG OUTPUT
53	TMO	TIME OVER SIGNAL OUTPUT (NEGATIVE-LOGIC)
7	WR	WRITE SIGNAL OUTPUT (NEGATIVE-LOGIC)
47	VDD	POWER LINE (+5V)
61	VDD	
40	GND	GND LINE
54	GND	
64	TEST	TEST MODE SET INPUT (TO BE CONNECTED WITH GND)
63	TPN	
37	TSG1	
38	TSG2	
39	TSG3	

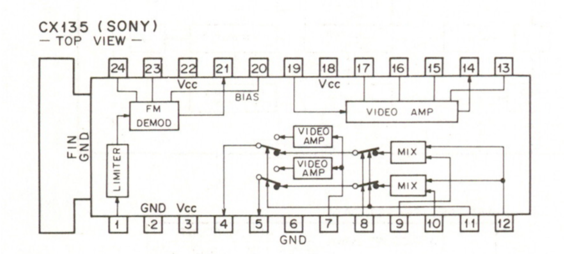




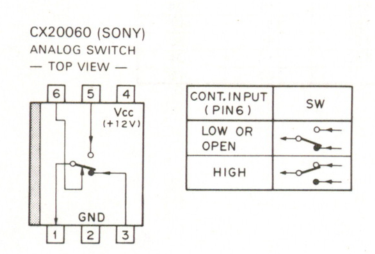
TIMING CHART



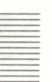
CX135 (SONY)
— TOP VIEW —



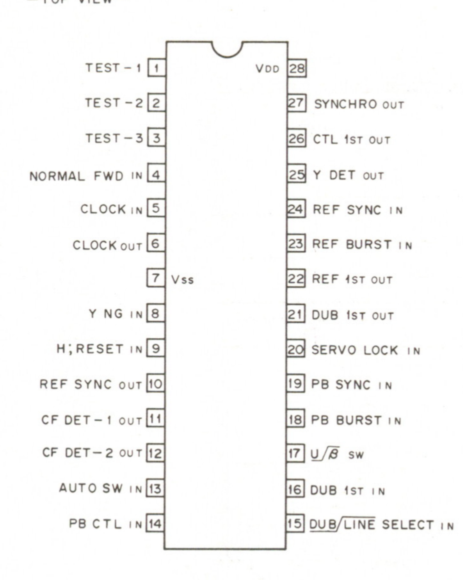
CX20060 (SONY)
ANALOG SWITCH
— TOP VIEW —

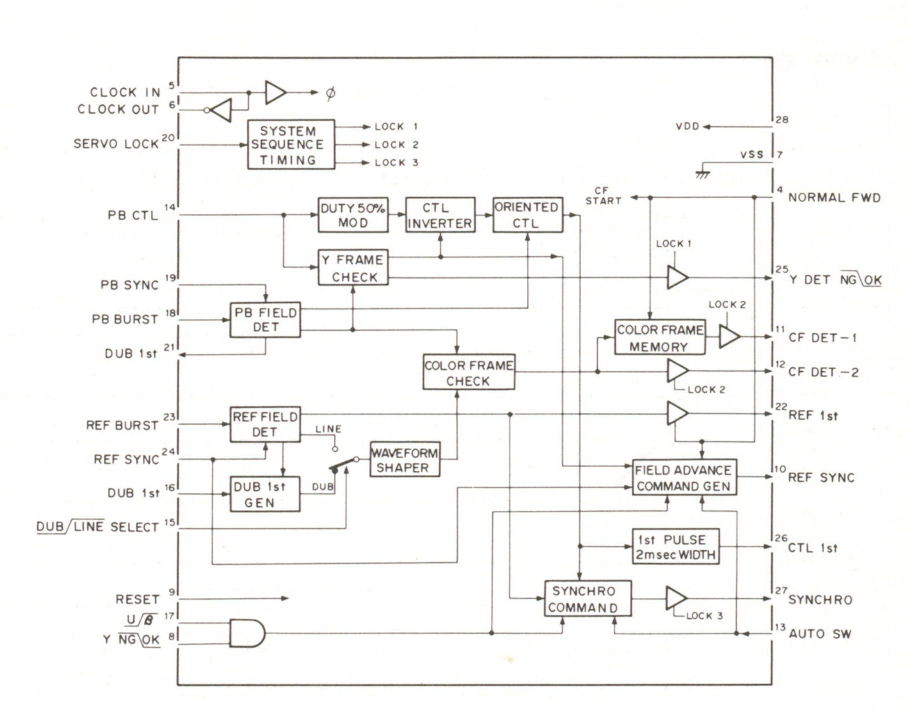


CONT. INPUT (PIN6)	SW
LOW OR OPEN	
HIGH	

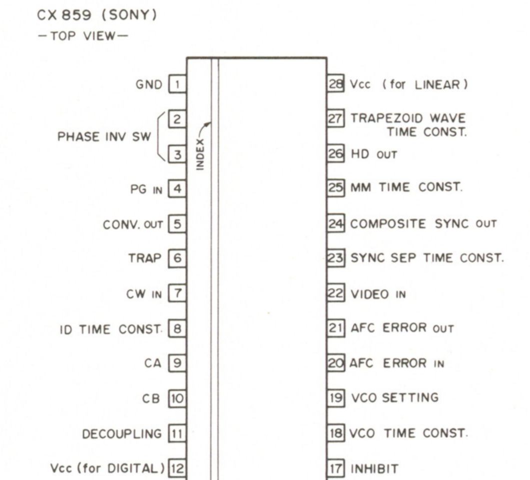


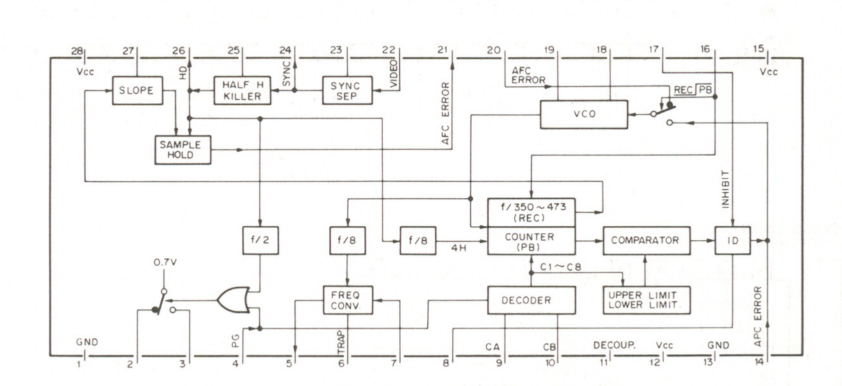
CX7928 (SONY)
C-MOS COLOR FRAMING CONTROL (PAL/SECAM)
—TOP VIEW—





CX859 (SONY)
—TOP VIEW—





DECODER TRUTH TABLE

CB / CA	LOW	OPEN	HIGH
LOW	C1	C7	—
OPEN	C4	C5	C6
HIGH	—	*C2 C3	C8

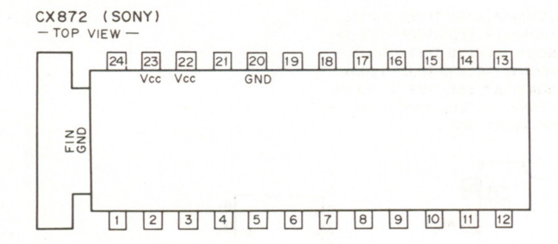
* PG : L--- C2
PG : H--- C3

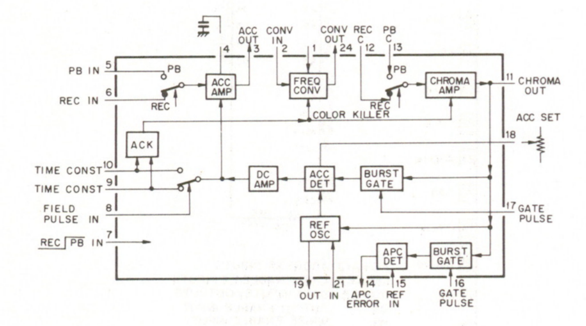
AFC/APC PRESET DATA

	AFC COUNT DOWN	APC ID COUNT	
		UPPER LIM.	LOWER LIM.
C1	f/473	105	95
C2	f/351	129	119
C3	f/353	137	127
C4	f/351	118	104
C5	f/351	131	117
C6	f/351	144	130
C7	f/350	136	104
C8	——	125	115

CX872 (SONY)

— TOP VIEW —

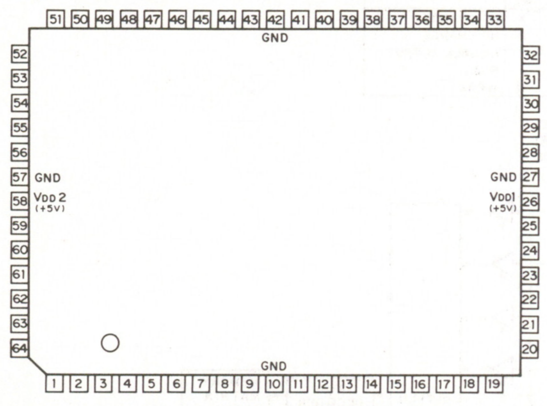




CXD1095Q (SONY) FLAT PACKAGE

C-MOS I/O PORT EXPANDER

— TOP VIEW —



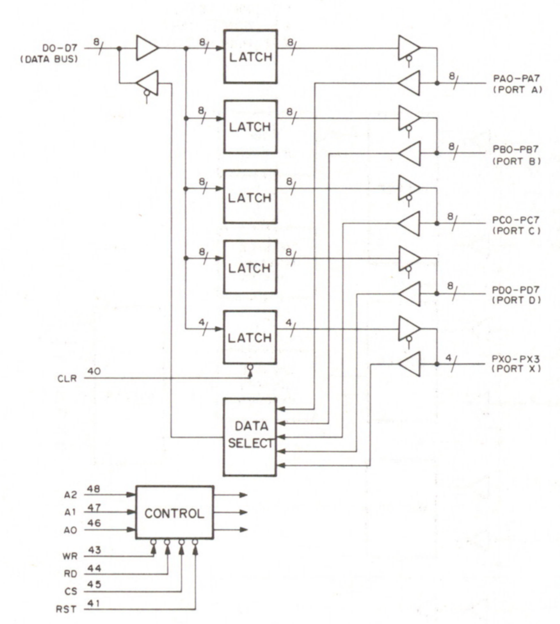
PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1			NC	17	○	○	PC6	33			NC	49	○	○	PX0
2			NC	18	○	○	PC7	34			NC	50	○	○	PX1
3	○	○	PB1	19			NC	35	○	○	D3	51			NC
4	○	○	PB2	20	○	○	PD0	36	○	○	D4	52	○	○	PX2
5	○	○	PB3	21	○	○	PD1	37	○	○	D5	53	○	○	PX3
6	○	○	PB4	22	○	○	PD2	38	○	○	D6	54	○	○	PA0
7	○	○	PB5	23	○	○	PD3	39	○	○	D7	55	○	○	PA1
8	○	○	PB6	24	○	○	PD4	40	○		CLR	56	○	○	PA2
9	○	○	PB7	25			GND	41	○		RST	57			GND
10			GND	26	○		VDD (+5V)	42			GND	58	○		VDD (+5V)
11	○	○	PC0	27	○	○	PD5	43	○		WR	59	○	○	PA3
12	○	○	PC1	28	○	○	PD6	44	○		RD	60	○	○	PA4
13	○	○	PC2	29	○	○	PD7	45	○		CS	61	○	○	PA5
14	○	○	PC3	30	○	○	D0	46	○		A0	62	○	○	PA6
15	○	○	PC4	31	○	○	D1	47	○		A1	63	○	○	PA7
16	○	○	PC5	32	○	○	D2	48	○		A2	64	○	○	PB0

30 D0, 31 D1, 32 D2, 35 D3, 36 D4, 37 D5, 38 D6, 39 D7
49 PX0, 50 PX1, 52 PX2, 53 PX3
46 A0, 47 A1, 48 A2
45 CS, 44 RD, 43 WR
41 RST, 40 CLR
PA0 54, PA1 55, PA2 56, PA3 59, PA4 60, PA5 61, PA6 62, PA7 63
PB0 64, PB1 3, PB2 4, PB3 5, PB4 6, PB5 7, PB6 8, PB7 9
PC0 11, PC1 12, PC2 13, PC3 14, PC4 15, PC5 16, PC6 17, PC7 18
PD0 20, PD1 21, PD2 22, PD3 23, PD4 24, PD5 27, PD6 28, PD7 29

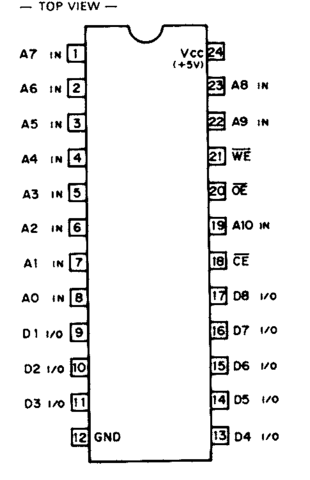
CS	RD	WR	A2	A1	A0	MODE
0	0	1	0	0	0	PORT A → DATA BUS
0	0	1	0	0	1	PORT B → DATA BUS
0	0	1	0	1	0	PORT C → DATA BUS
0	0	1	0	1	1	PORT D → DATA BUS
0	0	1	1	0	0	PORT X → DATA BUS
0	0	1	1	0	1	——
0	0	1	1	1	0	——
0	0	1	1	1	1	——
0	1	0	0	0	0	DATA BUS → PORT A
0	1	0	0	0	1	DATA BUS → PORT B
0	1	0	0	1	0	DATA BUS → PORT C
0	1	0	0	1	1	DATA BUS → PORT D
0	1	0	1	0	0	DATA BUS → PORT X
0	1	0	1	0	1	——
0	1	0	1	1	0	DATA BUS → CTL REG.1
0	1	0	1	1	1	DATA BUS → CTL REG.2
1	X	X	X	X	X	DATA BUS ; HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z, HIGH IMPEDANCE

D0–D7 ; DATA BUS INPUTS/OUTPUTS
CS ; CHIP SELECT INPUT
RD ; READ STROBE INPUT
WR ; WRITE STROBE INPUT
A0–A2 ; ADDRESS INPUT
RST ; RESET INPUT
CLR ; CLEAR INPUT
PA0–PA7 ; PORT A INPUTS/OUTPUTS
PB0–PB7 ; PORT B INPUTS/OUTPUTS
PC0–PC7 ; PORT C INPUTS/OUTPUTS
PD0–PD7 ; PORT D INPUTS/OUTPUTS
PX0–PX3 ; PORT X INPUTS/OUTPUTS



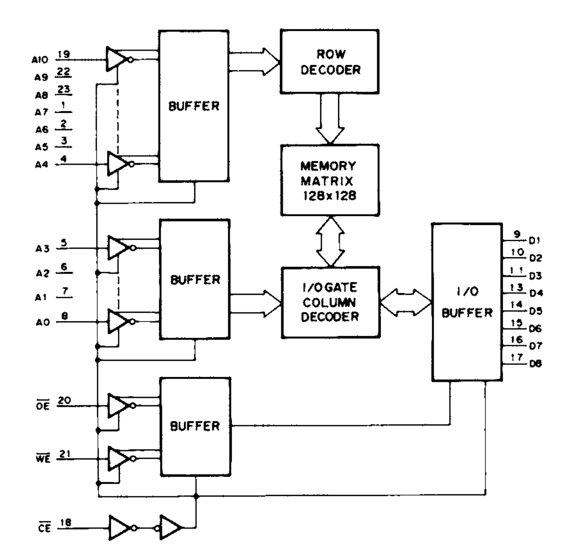
CXK5816PN-10 (SONY) (ACCESS TIME=100nS)
CXK5816PN-10L (SONY) (ACCESS TIME=100nS)
CXK5816PN-12 (SONY) (ACCESS TIME=120nS)
CXK5816PN-12L (SONY) (ACCESS TIME=120nS)
CXK5816PN-15 (SONY) (ACCESS TIME=150nS)
CXK5816PN-15L (SONY) (ACCESS TIME=150nS)
C-MOS 16384-BIT (2048x8) STATIC RAM
— TOP VIEW —



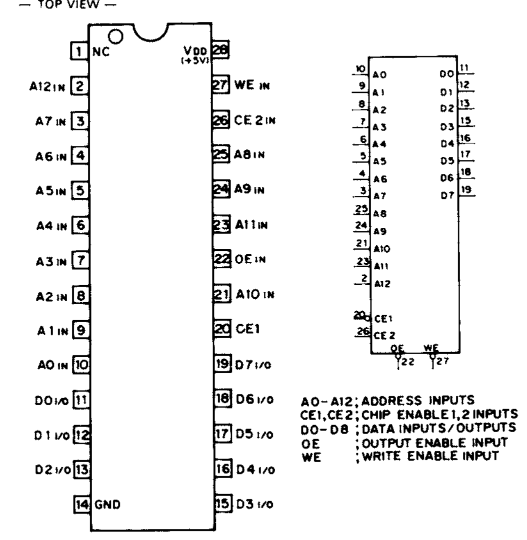
A0 - A10 ; ADDRESS INPUTS
CE ; CHIP ENABLE
D1 - D8 ; DATA INPUTS/OUTPUTS
OE ; OUTPUT ENABLE
WE ; WRITE ENABLE

INPUTS			FUNCTION
CE	OE	WE	
1	X	X	NO SELECTION(HI-Z)
0	1	1	OUTPUT DISABLE(HI-Z)
0	0	1	READ
0	X	0	WRITE

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE



CXK5864PN-10 (SONY) (ACCESS TIME=100nS)
CXK5864PN-10L (SONY) (ACCESS TIME=100nS)
CXK5864PN-12 (SONY) (ACCESS TIME=120nS)
CXK5864PN-12L (SONY) (ACCESS TIME=120nS)
CXK5864PN-15 (SONY) (ACCESS TIME = 150 nS)
CXK5864PN-15L (SONY) (ACCESS TIME = 150 nS)
C-MOS 64K (8Kx8-BIT) STATIC RAM
— TOP VIEW —

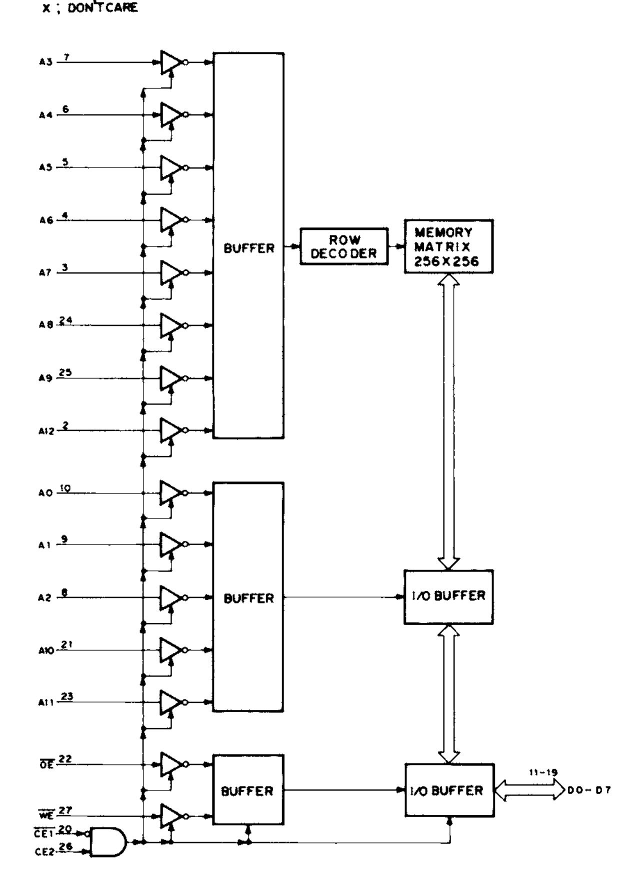


A0 - A12 ; ADDRESS INPUTS
CE1, CE2 ; CHIP ENABLE 1,2 INPUTS
D0 - D8 ; DATA INPUTS/OUTPUTS
OE ; OUTPUT ENABLE INPUT
WE ; WRITE ENABLE INPUT

MODE SELECTION

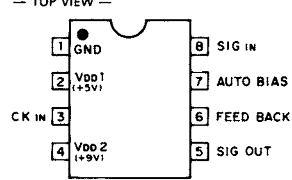
CONTROL INPUTS				MODE
CE1	CE2	OE	WE	
1	X	X	X	NO CHANGE
X	0	X	X	NO CHANGE
0	1	1	1	DISABLE OUTPUT
0	1	0	1	READ
0	1	X	0	WRITE

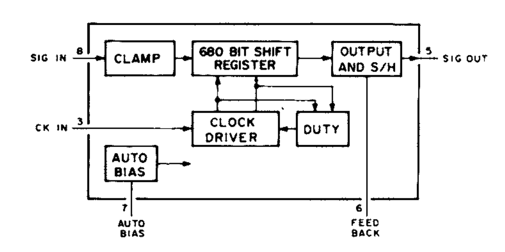
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE



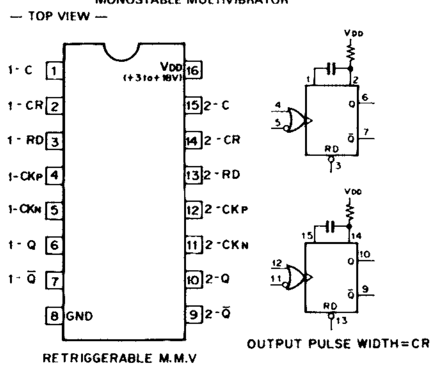


CXL5001P (SONY)
C-MOS CCD FOR NTSC 1H DELAY LINE
— TOP VIEW —

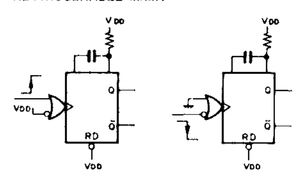




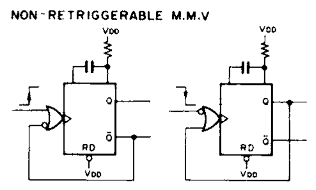
HD14538BP (HITACHI)
MC14538BCP (MOTOROLA)
TC4538BP (TOSHIBA)
C-MOS DUAL RETRIGGERABLE/NON-RETRIGGERABLE MONOSTABLE MULTIVIBRATOR
— TOP VIEW —



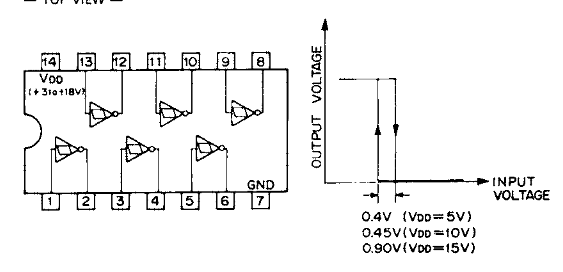
RETRIGGERABLE M.M.V



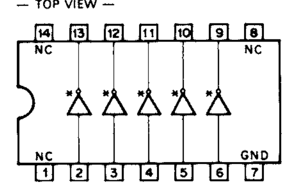
NON-RETRIGGERABLE M.M.V



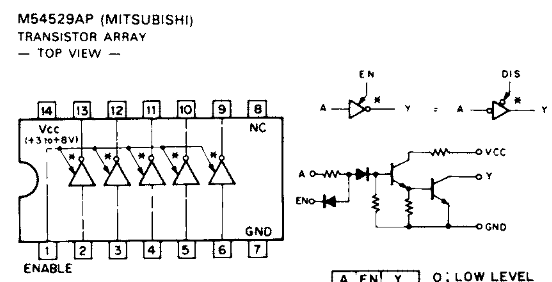
HD14584BP (HITACHI)
C-MOS SCHMITT TRIGGER INVERTER
— TOP VIEW —

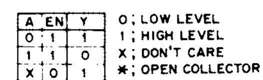


M54516P (MITSUBISHI)
INVERTER WITH OPEN-COLLECTOR
(DARLINGTON-CONNECTED TRANSISTOR ARRAY)
— TOP VIEW —



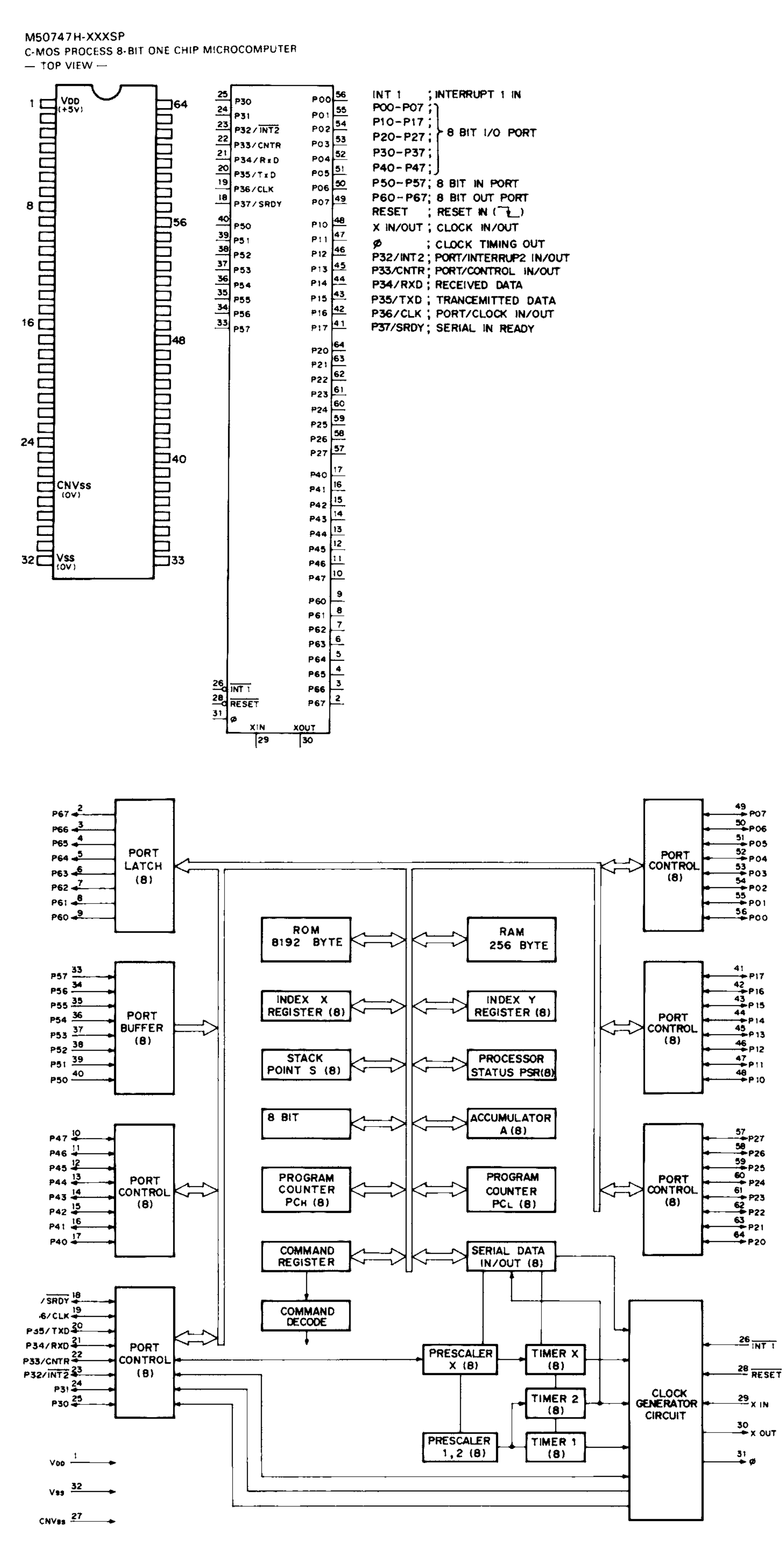
M54529AP (MITSUBISHI)
TRANSISTOR ARRAY
— TOP VIEW —





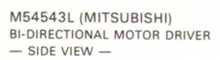
A	EN	Y
0	1	1
1	1	0
X	0	1

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
* ; OPEN COLLECTOR

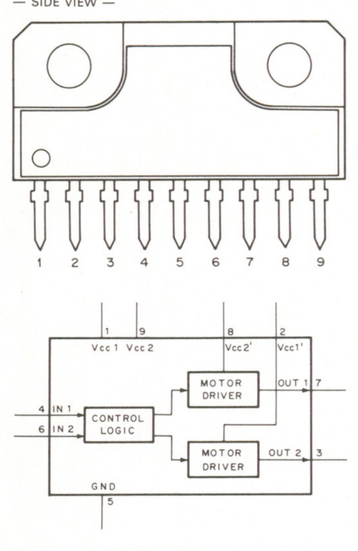


M50747H-XXXSP
C-MOS PROCESS 8-BIT ONE CHIP MICROCOMPUTER
— TOP VIEW —
VDD (+5V)
CNVss (0V)
Vss (0V)
INT 1 ; INTERRUPT 1 IN
P00–P07 ;
P10–P17 ;
P20–P27 ; 8 BIT I/O PORT
P30–P37 ;
P40–P47 ;
P50–P57; 8 BIT IN PORT
P60–P67; 8 BIT OUT PORT
RESET ; RESET IN
X IN/OUT ; CLOCK IN/OUT
ø ; CLOCK TIMING OUT
P32/INT2 ; PORT/INTERRUP2 IN/OUT
P33/CNTR ; PORT/CONTROL IN/OUT
P34/RXD ; RECEIVED DATA
P35/TXD ; TRANCEMITTED DATA
P36/CLK ; PORT/CLOCK IN/OUT
P37/SRDY ; SERIAL IN READY
PORT LATCH (8)
PORT BUFFER (8)
PORT CONTROL (8)
ROM 8192 BYTE
RAM 256 BYTE
INDEX X REGISTER (8)
INDEX Y REGISTER (8)
STACK POINT S (8)
PROCESSOR STATUS PSR(8)
8 BIT
ACCUMULATOR A (8)
PROGRAM COUNTER PCH (8)
PROGRAM COUNTER PCL (8)
COMMAND REGISTER
SERIAL DATA IN/OUT (8)
COMMAND DECODE
PRESCALER X (8)
TIMER X (8)
TIMER 2 (8)
PRESCALER 1,2 (8)
TIMER 1 (8)
CLOCK GENERATOR CIRCUIT
INT 1
RESET
X IN
X OUT
ø
VDD
Vss
CNVss





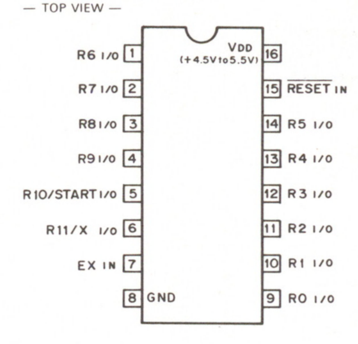
M54543L (MITSUBISHI)
BI-DIRECTIONAL MOTOR DRIVER
— SIDE VIEW —

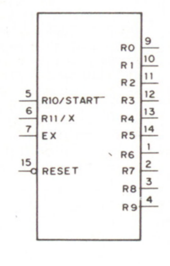


IN		OUT		MODE
1	2	1	2	
0	0	Z	Z	NO OPERATION
1	0	1	0	ROTATION
0	1	0	1	REVERSE ROTATION
1	1	0	0	BRAKE

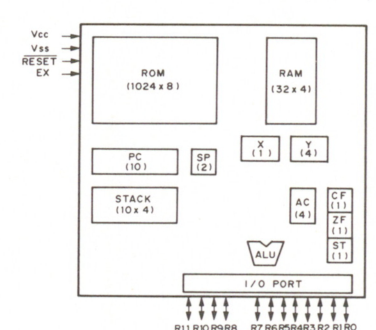
0 : LOW LEVEL
1 : HIGH LEVEL
Z : HIGH IMPEDANCE

MB88201H-539N (FUJITSU)
C-MOS 4 BIT MICROCOMPUTER
— TOP VIEW —

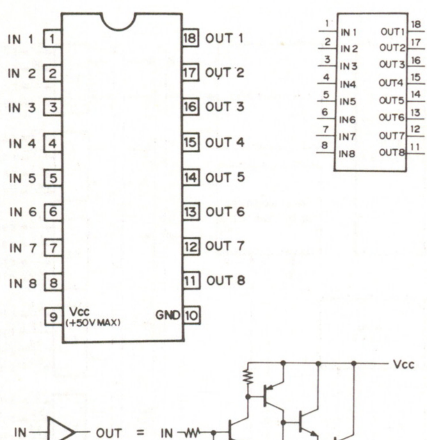


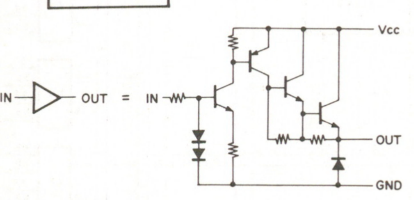


EX ; EXTERNAL X'TAL IN
R0–R11 ; I/O PORT(R) IN/OUT
$\overline{\text{RESET}}$; RESET IN
START ; STANDBY RELEASE IN
R11/X ; EXT CLOCK IN/INT CLOCK OUT

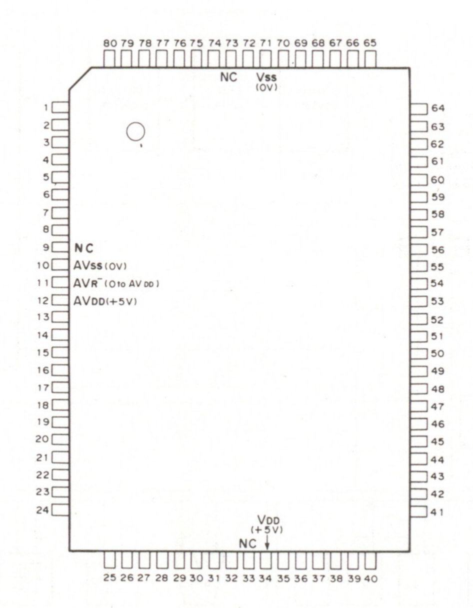


M54562P (MITSUBISHI)
SOURCE TYPE DARLINGTON TRANSISTOR ARRAY
— TOP VIEW —



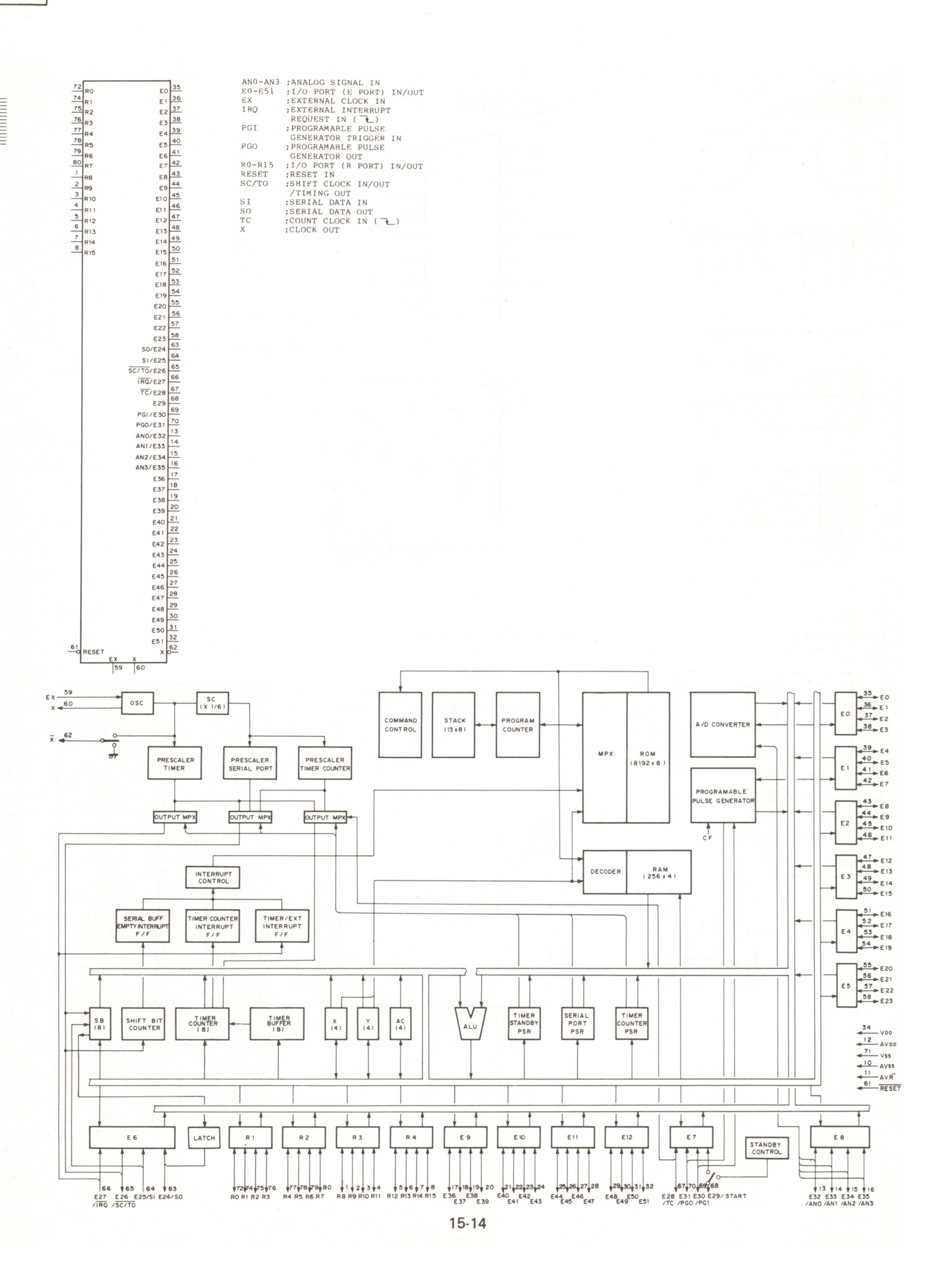


MB88551-H (FUJITSU) FLAT PACKAGE
C-MOS 4 BIT ONE-CHIP MICROPROCESSOR
— TOP VIEW —

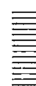


PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1	○	○	R8	41	○	○	E6
2	○	○	R9	42	○	○	E7
3	○	○	R10	43	○	○	E8
4	○	○	R11	44	○	○	E9
5	○	○	R12	45	○	○	E10
6	○	○	R13	46	○	○	E11
7	○	○	R14	47	○	○	E12
8	○	○	R15	48	○	○	E13
9	—	—	——	49	○	○	E14
10			AVss	50	○	○	E15
11			AVR⁻	51	○	○	E16
12			AVDD	52	○	○	E17
13	○	○	E32/AN0	53	○	○	E18
14	○	○	E33/AN1	54	○	○	E19
15	○	○	E34/AN2	55	○	○	E20
16	○	○	E35/AN3	56	○	○	E21
17	○	○	E36	57	○	○	E22
18	○	○	E37	58	○	○	E23
19	○	○	E38	59	○		EX
20	○	○	E39	60		○	X
21	○	○	E40	61	○		$\overline{\text{RESET}}$
22	○	○	E41	62		○	$\overline{\text{X}}$/(OPEN)*
23	○	○	E42	63	○	○	E24/SO
24	○	○	E43	64	○	○	E25/SI
25	○	○	E44	65	○	○	E26/$\overline{\text{SC/TO}}$
26	○	○	E45	66	○	○	E27/$\overline{\text{IRQ}}$
27	○	○	E46	67	○	○	E28/$\overline{\text{TC}}$
28	○	○	E47	68	○	○	E29/START*
29	○	○	E48	69	○	○	E30/PGI
30	○	○	E49	70	○	○	E31/PGO
31	○	○	E50	71			Vss
32	○	○	E51	72	○	○	R0
33	—	—	——	73	—	—	——
34			VDD	74	○	○	R1
35	○	○	E0	75	○	○	R2
36	○	○	E1	76	○	○	R3
37	○	○	E2	77	○	○	R4
38	○	○	E3	78	○	○	R5
39	○	○	E4	79	○	○	R6
40	○	○	E5	80	○	○	R7

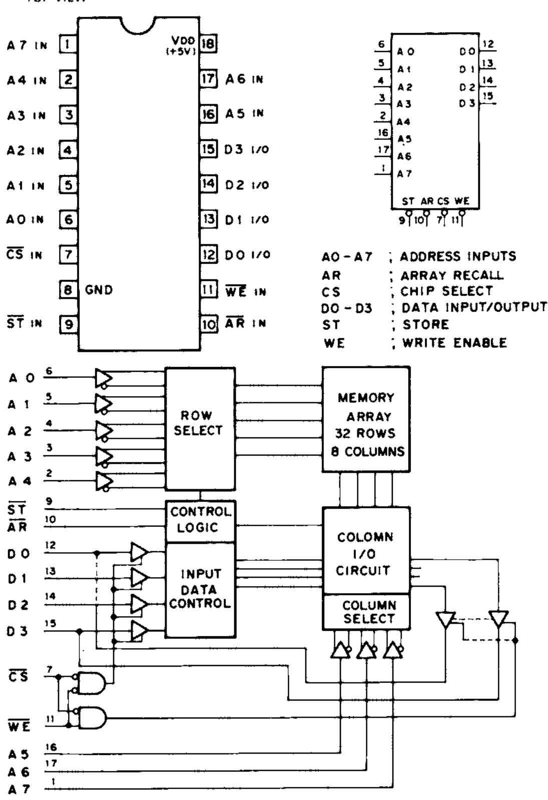
* MASK OPTION



AN0-AN3 ;ANALOG SIGNAL IN
E0-E51 ;I/O PORT (E PORT) IN/OUT
EX ;EXTERNAL CLOCK IN
IRQ ;EXTERNAL INTERRUPT REQUEST IN
PGI ;PROGRAMABLE PULSE GENERATOR TRIGGER IN
PGO ;PROGRAMABLE PULSE GENERATOR OUT
R0-R15 ;I/O PORT (R PORT) IN/OUT
RESET ;RESET IN
SC/TO ;SHIFT CLOCK IN/OUT /TIMING OUT
SI ;SERIAL DATA IN
SO ;SERIAL DATA OUT
TC ;COUNT CLOCK IN
X ;CLOCK OUT
OSC
SC (X 1/6)
PRESCALER TIMER
PRESCALER SERIAL PORT
PRESCALER TIMER COUNTER
OUTPUT MPX
INTERRUPT CONTROL
SERIAL BUFF EMPTY INTERRUPT F/F
TIMER COUNTER INTERRUPT F/F
TIMER/EXT INTERRUPT F/F
COMMAND CONTROL
STACK (13 x 8)
PROGRAM COUNTER
MPX
ROM (8192 x 8)
DECODER
RAM (256 x 4)
A/D CONVERTER
PROGRAMABLE PULSE GENERATOR
SB (8)
SHIFT BIT COUNTER
TIMER COUNTER (8)
TIMER BUFFER (8)
X (4)
Y (4)
AC (4)
ALU
TIMER STANDBY PSR
SERIAL PORT PSR
TIMER COUNTER PSR
LATCH
STANDBY CONTROL



MBM2212-25P (FUJITSU) (ACCESS TIME = 250nS)
N-MOS 1024 (256x4)-BIT NONVOLATILE STATIC RAM
— TOP VIEW —

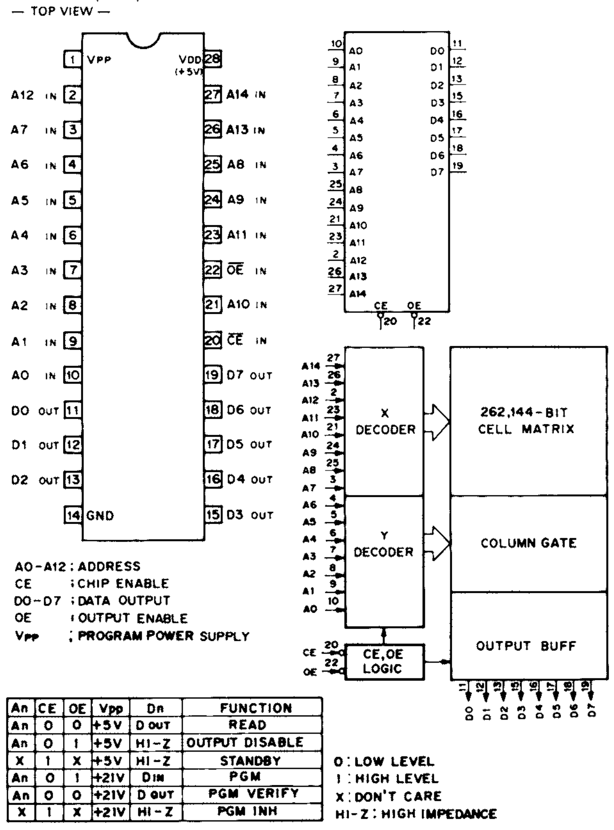


A0 – A7 ; ADDRESS INPUTS
AR ; ARRAY RECALL
CS ; CHIP SELECT
D0 – D3 ; DATA INPUT/OUTPUT
ST ; STORE
WE ; WRITE ENABLE

INPUTS				I/O	MODE
CS	WE	AR	ST		
1	X	1	1	HI-Z	NOT SELECTED
0	1	1	1	OUTPUT DATA	RAM READ
0	0	1	1	INPUT DATA 1	RAM WRITE "1"
0	0	1	1	INPUT DATA 0	RAM WRITE "0"
X	1	0	1	HI-Z	ARRAY RECALL
1	X	0	1	HI-Z	ARRAY RECALL
X	1	1	0	HI-Z	NONVOLATILE STORING
1	X	1	0	HI-Z	NONVOLATILE STORING

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

MBM27C256-25 (FUJITSU) (ACCESS TIME = 250 nS)
C-MOS 256K (32K-8) ERASABLE PROM WITH 3-STATE OUTPUTS
— TOP VIEW —

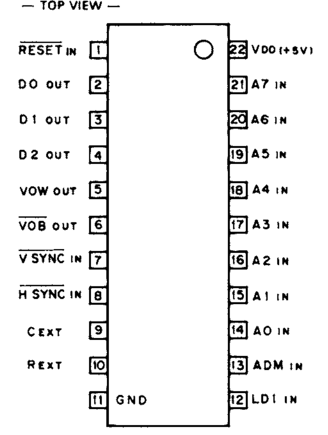


A0–A12 ; ADDRESS
CE ; CHIP ENABLE
D0–D7 ; DATA OUTPUT
OE ; OUTPUT ENABLE
Vpp ; PROGRAM POWER SUPPLY

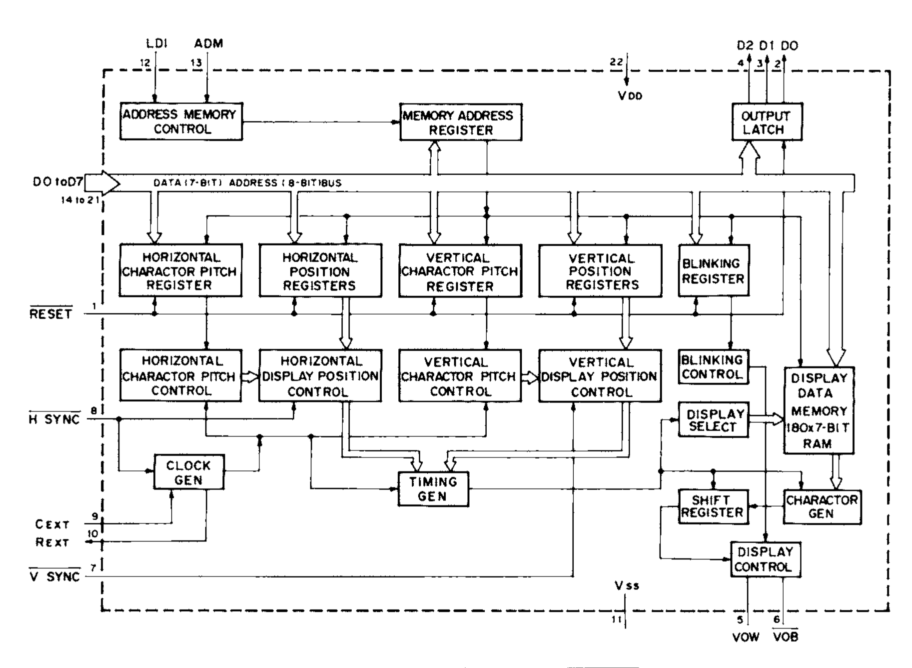
An	CE	OE	Vpp	Dn	FUNCTION
An	0	0	+5V	D OUT	READ
An	0	1	+5V	HI-Z	OUTPUT DISABLE
X	1	X	+5V	HI-Z	STANDBY
An	0	1	+21V	DIN	PGM
An	0	0	+21V	D OUT	PGM VERIFY
X	1	X	+21V	HI-Z	PGM INH

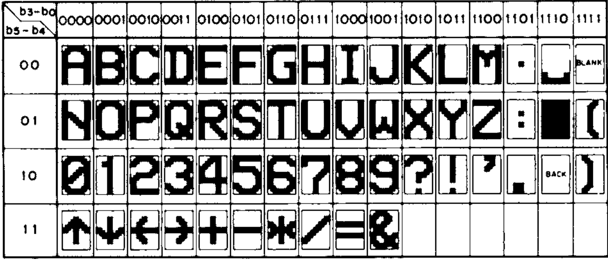
0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE
HI-Z : HIGH IMPEDANCE

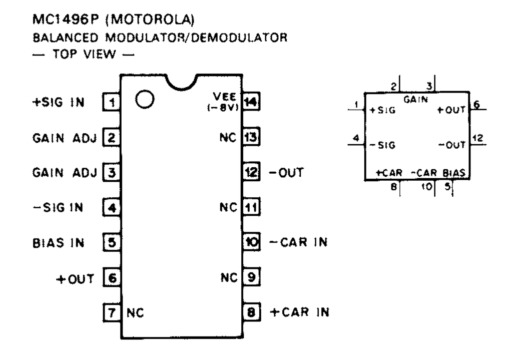
MB88303 (FUJITSU)
N-MOS PROGRAMMABLE TV DISPLAY CONTROLLER
— TOP VIEW —

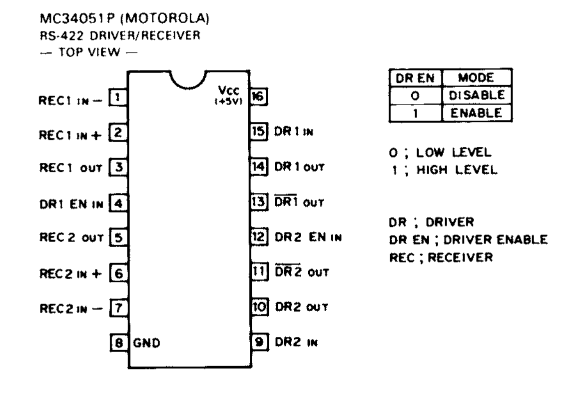


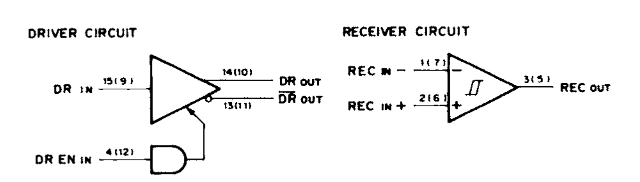
ADM ; ADDRESS INCREMENT MODE
A0 to A7 ; ADDRESS INPUT
D0 to D2 ; DATA OUTPUT
CEXT , EXT CAPACITOR FOR OSC
LDI ; LOAD DATA AND INSTRUCTION
VOB ; VIDEO BLACK OUT
VOW ; VIDEO WHITE OUT
REXT ; EXT RESISTOR FOR OSC


LDI
ADM
D2 D1 D0
VDD
ADDRESS MEMORY CONTROL
MEMORY ADDRESS REGISTER
OUTPUT LATCH
D0 to D7
14 to 21
DATA (7-BIT) ADDRESS (8-BIT)BUS
HORIZONTAL CHARACTOR PITCH REGISTER
HORIZONTAL POSITION REGISTERS
VERTICAL CHARACTOR PITCH REGISTER
VERTICAL POSITION REGISTERS
BLINKING REGISTER
RESET
HORIZONTAL CHARACTOR PITCH CONTROL
HORIZONTAL DISPLAY POSITION CONTROL
VERTICAL CHARACTOR PITCH CONTROL
VERTICAL DISPLAY POSITION CONTROL
BLINKING CONTROL
DISPLAY DATA MEMORY 180x7-BIT RAM
H SYNC
DISPLAY SELECT
CLOCK GEN
TIMING GEN
SHIFT REGISTER
CHARACTOR GEN
CEXT
REXT
V SYNC
DISPLAY CONTROL
Vss
VOW
VOB

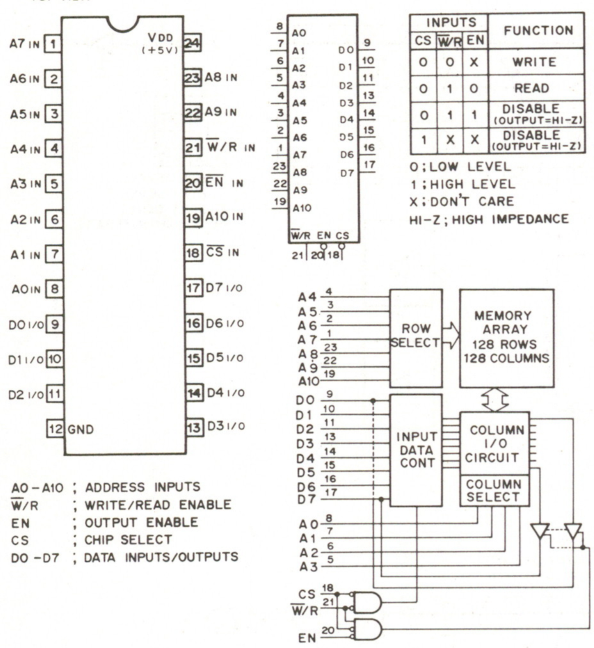

b3-b0
b5-b4
0000 0001 0010 0011 0100 0101 0110 0111 1000 1001 1010 1011 1100 1101 1110 1111
00 A B C D E F G H I J K L M · ␣ BLANK
01 N O P Q R S T U V W X Y Z : ■ (
10 0 1 2 3 4 5 6 7 8 9 ? ! ' . BACK)
11 ↑ ↓ ← → + — * / = &


MC1496P (MOTOROLA)
BALANCED MODULATOR/DEMODULATOR
— TOP VIEW —
+SIG IN 1
GAIN ADJ 2
GAIN ADJ 3
-SIG IN 4
BIAS IN 5
+OUT 6
7 NC
VEE (-8V) 14
NC 13
12 -OUT
NC 11
10 -CAR IN
NC 9
8 +CAR IN
GAIN
+SIG
+OUT
-SIG
-OUT
+CAR -CAR BIAS


MC34051P (MOTOROLA)
RS-422 DRIVER/RECEIVER
— TOP VIEW —
REC1 IN – 1
REC1 IN + 2
REC1 OUT 3
DR1 EN IN 4
REC2 OUT 5
REC2 IN + 6
REC2 IN – 7
8 GND
Vcc (+5V) 16
15 DR1 IN
14 DR1 OUT
13 DR1 OUT
12 DR2 EN IN
11 DR2 OUT
10 DR2 OUT
9 DR2 IN
DR EN | MODE
0 | DISABLE
1 | ENABLE
0 ; LOW LEVEL
1 ; HIGH LEVEL
DR ; DRIVER
DR EN ; DRIVER ENABLE
REC ; RECEIVER


DRIVER CIRCUIT
DR IN
DR OUT
DR OUT
DR EN IN
RECEIVER CIRCUIT
REC IN –
REC IN +
REC OUT

MSM5128-15RS (OKI) (ACCESS TIME = 150 nS)
C-MOS 16384(2048x8)-BIT HIGH SPEED STATIC RAM
— TOP VIEW —

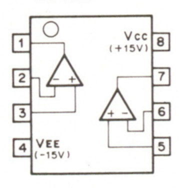


INPUTS			FUNCTION
CS	W/R	EN	
0	0	X	WRITE
0	1	0	READ
0	1	1	DISABLE (OUTPUT=HI-Z)
1	X	X	DISABLE (OUTPUT=HI-Z)

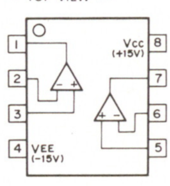
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

A0 – A10 ; ADDRESS INPUTS
W/R ; WRITE/READ ENABLE
EN ; OUTPUT ENABLE
CS ; CHIP SELECT
D0 – D7 ; DATA INPUTS/OUTPUTS

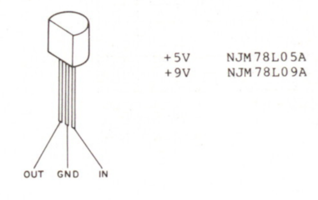
NJM4560D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —

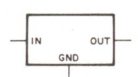


NJM4562D-D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —

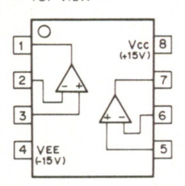


NJM78L ? ?A (NEC)
POSITIVE VOLTAGE REGULATOR (100mA)

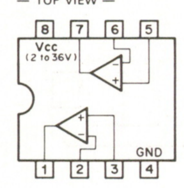




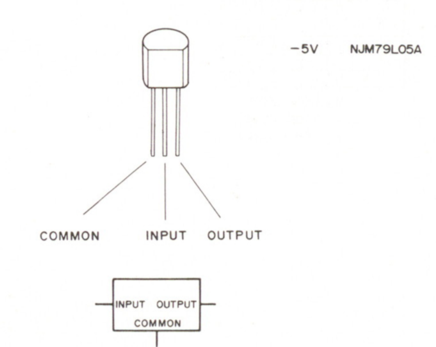
NJM2043D-D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —



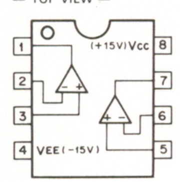
NJM2903D (JRC)
VOLTAGE COMPARATOR
— TOP VIEW —



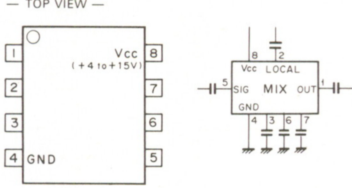
NJM79L ? ?A (JRC)
NEGATIVE VOLTAGE REGULATOR (100mA)
— FRONT VIEW —



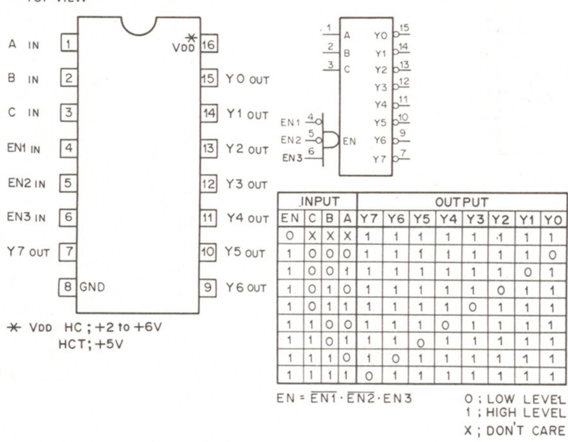
NJM4558D (JRC)
uPC4558C (NEC)
OPERATIONAL AMPLIFIER
— TOP VIEW —



SN16913P (TI)
SN16913P-A (TI)
BALANCED MIXER
— TOP VIEW —



SN74HC138N (TI)
TC74HC138P (TOSHIBA)
C-MOS 3-TO-8 LINE DECODER/DEMULTIPLEXER
— TOP VIEW —



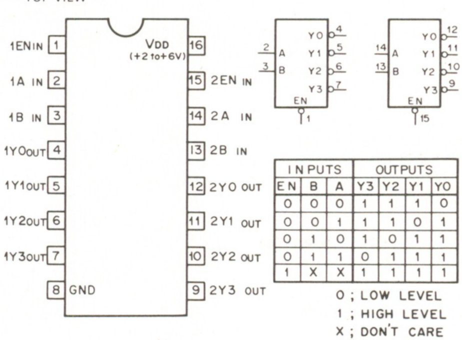
INPUT				OUTPUT							
EN	C	B	A	Y7	Y6	Y5	Y4	Y3	Y2	Y1	Y0
0	X	X	X	1	1	1	1	1	1	1	1
1	0	0	0	1	1	1	1	1	1	1	0
1	0	0	1	1	1	1	1	1	1	0	1
1	0	1	0	1	1	1	1	1	0	1	1
1	0	1	1	1	1	1	1	0	1	1	1
1	1	0	0	1	1	1	0	1	1	1	1
1	1	0	1	1	1	0	1	1	1	1	1
1	1	1	0	1	0	1	1	1	1	1	1
1	1	1	1	0	1	1	1	1	1	1	1

* VDD HC ; +2 to +6V
HCT ; +5V

$EN = \overline{EN1} \cdot \overline{EN2} \cdot EN3$

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

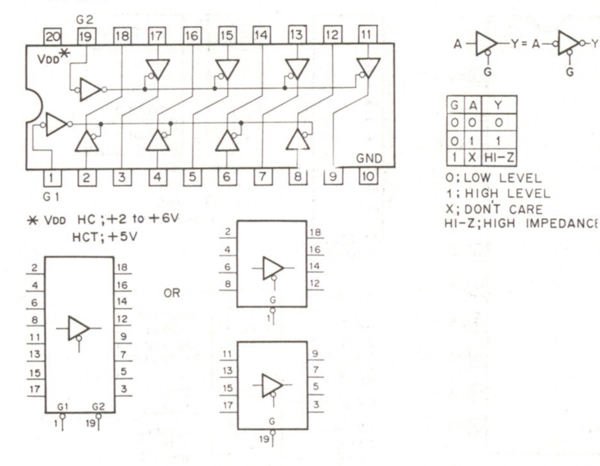
SN74HC139N (TI)
TC74HC139P (TOSHIBA)
C-MOS 1-OF-4 DECODER/DEMULTIPLEXER
— TOP VIEW —



INPUTS			OUTPUTS			
EN	B	A	Y3	Y2	Y1	Y0
0	0	0	1	1	1	0
0	0	1	1	1	0	1
0	1	0	1	0	1	1
0	1	1	0	1	1	1
1	X	X	1	1	1	1

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

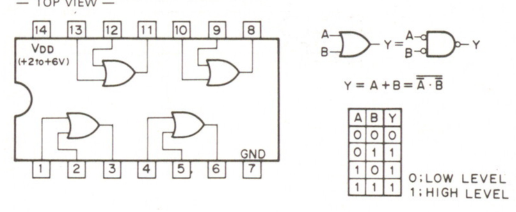
SN74HC244N (TI)
C-MOS BUS BUFFER WITH 3-STATE OUTPUT
— TOP VIEW —



G	A	Y
0	0	0
0	1	1
1	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE

SN74HC32N (TI)
C-MOS 2-INPUT OR GATE
— TOP VIEW —

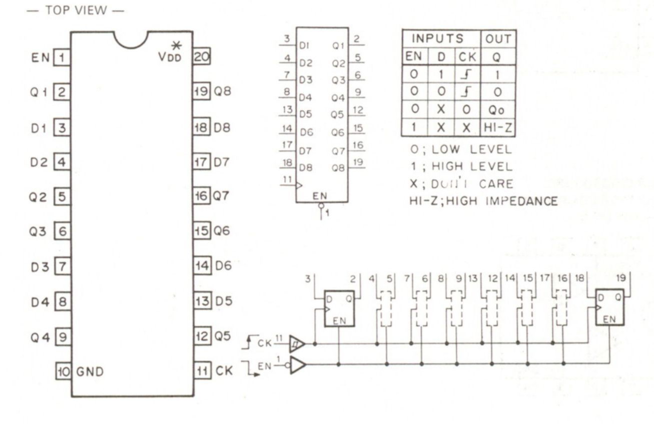


$Y = A + B = \overline{\overline{A} \cdot \overline{B}}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

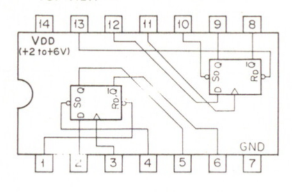
SN74HC374N (TI) (*VDD; +2 to +6V)
C-MOS 3-STATE OCTAL D-TYPE FLIP-FLOP
— TOP VIEW —



INPUTS			OUT
EN	D	CK	Q
0	1	↑	1
0	0	↑	0
0	X	0	Qo
1	X	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE

SN74HC74N (TI)
TC74HC74P (TOSHIBA)
C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
— TOP VIEW —



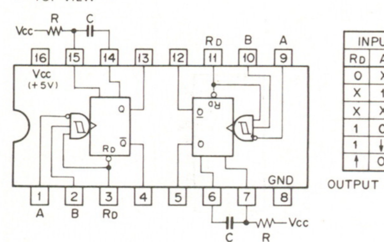
INPUTS				OUTPUTS	
SD	RD	CK	D	Qn+1	$\overline{Qn+1}$
0	1	X	X	1	0
1	0	X	X	0	1
0	0	X	X	1*	1*
1	1	↑	1	1	0
1	1	↑	0	0	1
1	1	0	X	Qn	$\overline{Qn}$

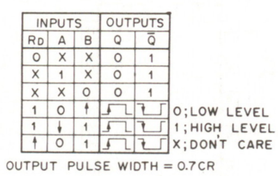
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
1*; NONSTABLE

SN74LS221N (TI)

TTL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT

— TOP VIEW —





INPUTS			OUTPUTS	
R_D	A	B	Q	$\overline{Q}$
0	X	X	0	1
X	1	X	0	1
X	X	0	0	1
1	0	↑	⊓	⊔
1	↓	1	⊓	⊔
↑	0	1	⊓	⊔

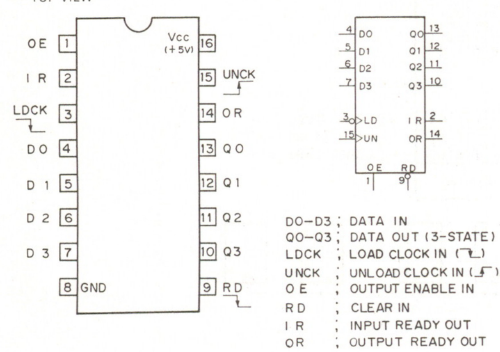
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

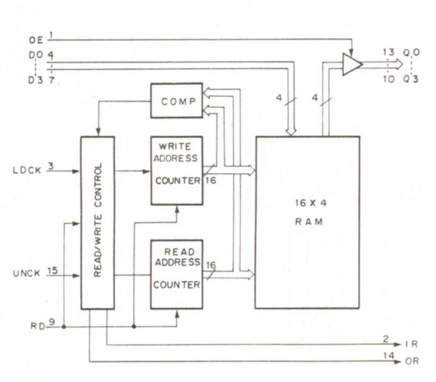
OUTPUT PULSE WIDTH = 0.7CR

SN74LS224N (TI)

TTL 16 WORD×4 BIT ASYNCHRONOUS FIRST-IN FIRST-OUT MEMORY

— TOP VIEW —

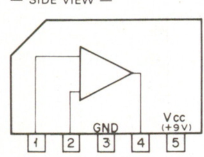




TA7060AP (TOSHIBA)

LINEAR AMP

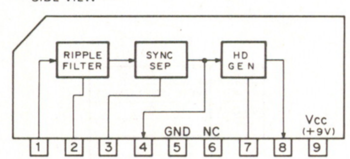
— SIDE VIEW —



TA7357AP (TOSHIBA)

SYNC SEPARATOR/HD PULSE GENERATOR

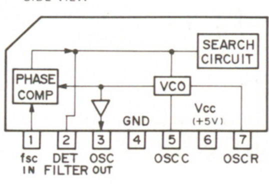
— SIDE VIEW —



TA7374P (TOSHIBA)

THREE TIMES OSCILLATOR

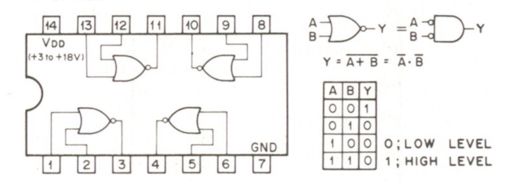
— SIDE VIEW —



TC4001BP (TOSHIBA)

C-MOS 2-INPUT NOR GATE

— TOP VIEW —



$Y = \overline{A+B} = \overline{A}\cdot\overline{B}$

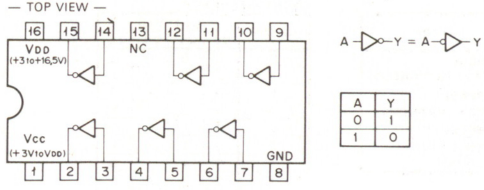
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

TC4009UBP (TOSHIBA)

C-MOS INVERTING TYPE BUFFER/CONVERTER (TO TTL LEVEL)

— TOP VIEW —

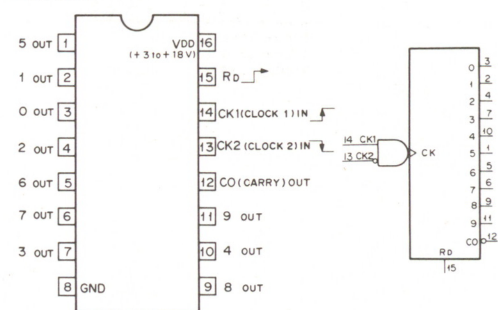


A	Y
0	1
1	0

TC4017BP (TOSHIBA)

C-MOS DECADE COUNTER/DIVIDER

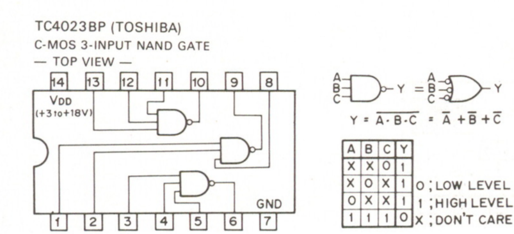
— TOP VIEW —



COUNT	INPUTS		OUTPUTS										
	RD	$CK = CK1 \cdot \overline{CK2}$	9	8	7	6	5	4	3	2	1	0	CO
0	1	X	0	0	0	0	0	0	0	0	0	1	1
0	0	↑	0	0	0	0	0	0	0	0	0	1	1
1	0	↑	0	0	0	0	0	0	0	0	1	0	1
2	0	↑	0	0	0	0	0	0	0	1	0	0	1
3	0	↑	0	0	0	0	0	0	1	0	0	0	1
4	0	↑	0	0	0	0	0	1	0	0	0	0	1
5	0	↑	0	0	0	0	1	0	0	0	0	0	0
6	0	↑	0	0	0	1	0	0	0	0	0	0	0
7	0	↑	0	0	1	0	0	0	0	0	0	0	0
8	0	↑	0	1	0	0	0	0	0	0	0	0	0
9	0	↑	1	0	0	0	0	0	0	0	0	0	0
NO COUNT	0	1	NO CHANGE										
	0	0											

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

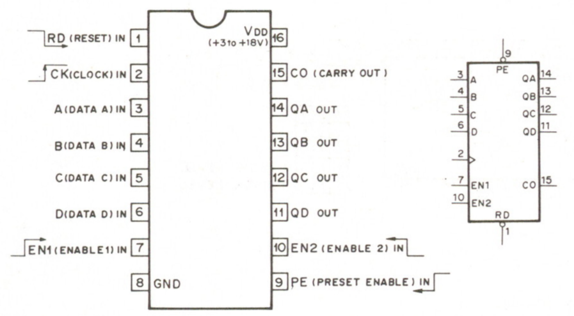
TC4023BP (TOSHIBA)
C-MOS 3-INPUT NAND GATE
— TOP VIEW —



A	B	C	Y
X	X	0	1
X	0	X	1
0	X	X	1
1	1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

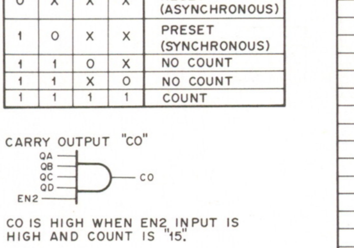
TC40161BP (TOSHIBA)
C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER WITH ASYNCHRONOUS RESET
— TOP VIEW —



MODE SELECTION

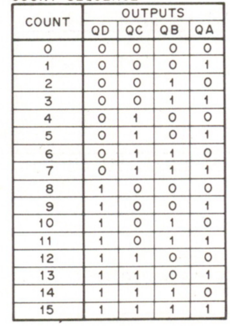
CONTROL INPUTS				MODE
RD	PE	EN1	EN2	
0	X	X	X	RESET (ASYNCHRONOUS)
1	0	X	X	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	X	0	NO COUNT
1	1	1	1	COUNT

CARRY OUTPUT "CO"



CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

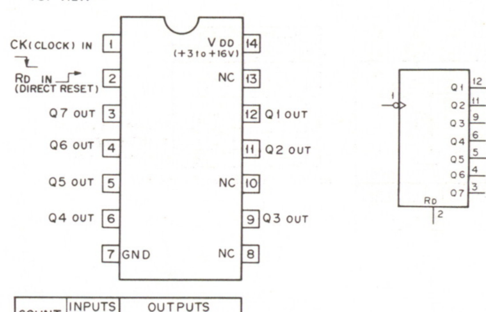
COUNT SEQUENCE



COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

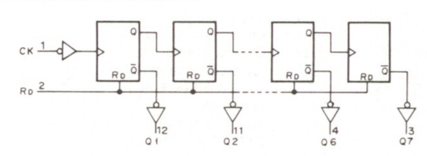
0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE

TC4024BP (TOSHIBA)
C-MOS ASYNCHRONOUS 7-BIT BINARY COUNTER
— TOP VIEW —

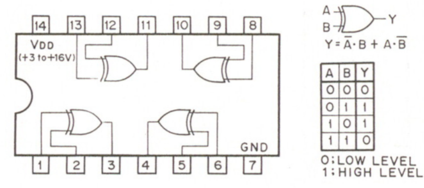


COUNT	INPUTS		OUTPUTS						
	CK	RD	Q7	Q6	Q5	Q4	Q3	Q2	Q1
0	X	1	0	0	0	0	0	0	0
1	⌝⌞	0	0	0	0	0	0	0	1
2	⌝⌞	0	0	0	0	0	0	1	0
3	⌝⌞	0	0	0	0	0	0	1	1
4	⌝⌞	0	0	0	0	0	1	0	0
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
125	⌝⌞	0	1	1	1	1	1	0	1
126	⌝⌞	0	1	1	1	1	1	1	0
127	⌝⌞	0	1	1	1	1	1	1	1
—	0	0	NO CHANGE						
—	1	0							

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE



TC4030BP (TOSHIBA)
TC4030BPHB (TOSHIBA)
uPD4030BC (NEC)
C-MOS EXCLUSIVE OR GATE
— TOP VIEW —



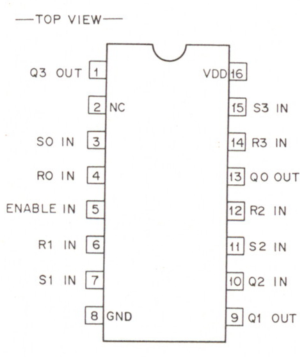
Y = $\overline{A} \cdot B + A \cdot \overline{B}$

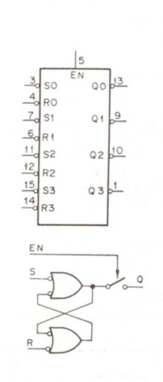
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

0;LOW LEVEL
1;HIGH LEVEL

TC4044BP (TOSHIBA)
C-MOS 3-STATE OUTPUT NAND R/S LATCH

—TOP VIEW—





S	R	E	Q
X	X	0	HIGH INPEDANCE
0	0	1	0
0	1	1	1
1	0	1	0
1	1	1	NO CHANGE

X: DON'T CARE



TC4051BP (TOSHIBA)
C-MOS 8-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —

S4 IN/OUT 1, S6 IN/OUT 2, SC OUT/IN 3, S7 IN/OUT 4, S5 IN/OUT 5, EN (ENABLE) IN 6, VEE* 7, GND 8, C IN 9, B IN 10, A (BINARY CONTROL) IN 11, S3 IN/OUT 12, SO IN/OUT 13, S1 IN/OUT 14, S2 IN/OUT 15, VDD (+3 to + 18V) 16

VEE*; VDD − VEE = + 3 to + 18V

EN	C	B	A	"ON" CHANNEL
0	0	0	0	0
0	0	0	1	1
0	0	1	0	2
0	0	1	1	3
0	1	0	0	4
0	1	0	1	5
0	1	1	0	6
0	1	1	1	7
1	X	X	X	OPEN

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

TC4052BP (TOSHIBA)
TC4052BPHB (TOSHIBA)
C-MOS 4-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —

YO IN/OUT 1, Y2 IN/OUT 2, YC IN/OUT 3, Y3 IN/OUT 4, Y1 IN/OUT 5, EN IN 6, VEE* 7, GND 8, B IN 9, A IN 10, X3 IN/OUT 11, XO IN/OUT 12, XC IN/OUT 13, X1 IN/OUT 14, X2 IN/OUT 15, VDD (+3 to +18V) 16

VEE*; VDD − VEE = + 3 to + 18V

CONTROL INPUTS			"ON" CHANNEL
EN	B	A	
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	X	X	OPEN

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

TC4053BP (TOSHIBA)
TC4053BPHB (TOSHIBA)
C-MOS 2-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —

X1 IN/OUT 1, XO IN/OUT 2, Y1 IN/OUT 3, YC IN/OUT 4, YO IN/OUT 5, EN IN 6, VEE* 7, GND 8, AY IN/OUT 9, AX IN/OUT 10, AZ IN/OUT 11, ZO IN/OUT 12, Z1 IN/OUT 13, ZC IN/OUT 14, XC IN/OUT 15, VDD (+3 to +18V) 16

VEE*; VDD − VEE = + 3 to + 18 V

CONT. INPUTS		ON CHANNEL
EN	A (X,Y,Z,)	
0	0	0
0	1	1
1	X	OPEN

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

TC4066BFHB (TOSHIBA) FLAT PACKAGE
TC4066BP (TOSHIBA)
C-MOS BILATERAL ANALOG SWITCH
— TOP VIEW —

VDD (+3 to +18V), GND
IN/OUT — IN/OUT, CONTROL

CONTROL	SWITCH
0	OFF
1	ON

0; LOW LEVEL
1; HIGH LEVEL

TC4069UBP (TOSHIBA)
C-MOS INVERTER
— TOP VIEW —

VDD (+3 to +18V), GND
Y = $\overline{A}$

A	Y
0	1
1	0

0; LOW LEVEL
1; HIGH LEVEL

TC4071BP (TOSHIBA)
C-MOS 2-INPUT OR GATE
— TOP VIEW —

VDD (+3 to +15V), GND
Y = A + B = $\overline{\overline{A} \cdot \overline{B}}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

TC4081BP (TOSHIBA)
C-MOS 2-INPUT AND GATE
— TOP VIEW —

VDD (+3 to +15V), GND
Y = A · B = $\overline{\overline{A} + \overline{B}}$

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

TC4082BP (TOSHIBA)
C-MOS 4-INPUT AND GATE
— TOP VIEW —

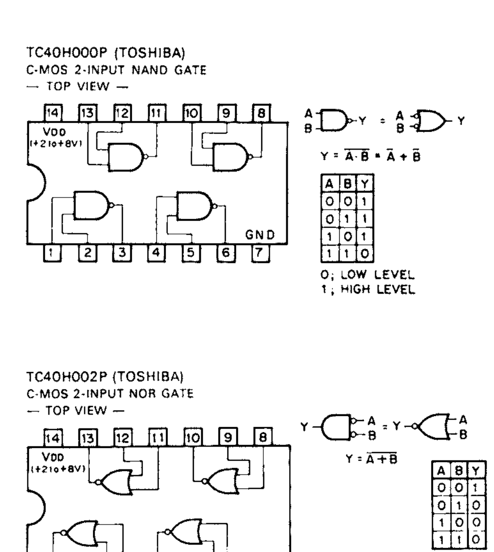
VDD (+3 to +18V), NC, NC, GND
Y = ABCD = $\overline{\overline{A}+\overline{B}+\overline{C}+\overline{D}}$

D	C	B	A	Y
X	X	X	0	0
X	X	0	X	0
X	0	X	X	0
0	X	X	X	0
1	1	1	1	1

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE



TC40H000P (TOSHIBA)
C-MOS 2-INPUT NAND GATE
— TOP VIEW —



A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

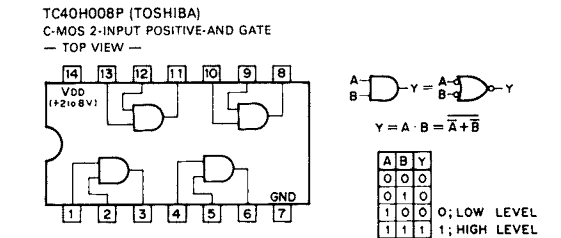
TC40H002P (TOSHIBA)
C-MOS 2-INPUT NOR GATE
— TOP VIEW —

Y = $\overline{A+B}$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0: LOW LEVEL
1: HIGH LEVEL

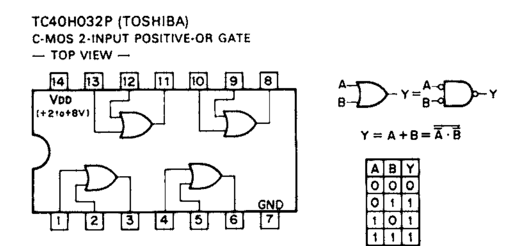
TC40H008P (TOSHIBA)
C-MOS 2-INPUT POSITIVE-AND GATE
— TOP VIEW —



A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

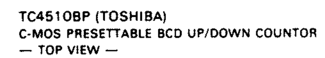
0; LOW LEVEL
1; HIGH LEVEL

TC40H032P (TOSHIBA)
C-MOS 2-INPUT POSITIVE-OR GATE
— TOP VIEW —

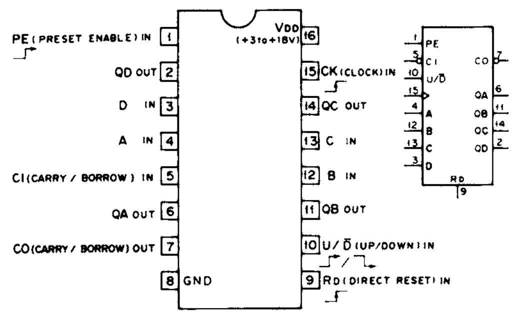


A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0: LOW LEVEL
1: HIGH LEVEL



TC4510BP (TOSHIBA)
C-MOS PRESETTABLE BCD UP/DOWN COUNTOR
— TOP VIEW —



INPUTS					OUTPUTS			
CK	RD	PE	CI	U/$\overline{D}$	QD	QC	QB	QA
X	1	X	X	X	0	0	0	0
X	0	1	X	X	SET TO A,B,C,D			
↑	0	0	0	1	COUNT UP			
↑	0	0	0	0	COUNT DOWN			
0	0	0	X	X	NO CHANGE			
X	0	0	1	X	NO CHANGE			

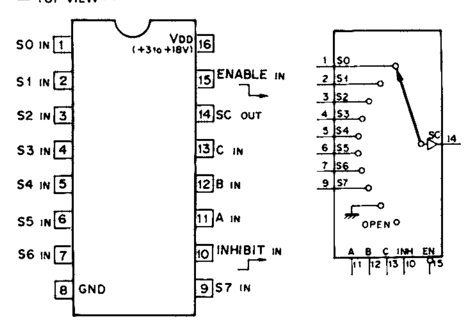
CO=L
CI=L &(DOWN·COUNT "0" OR UP·COUNT "9")

COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1

COUNT UP ↓ / COUNT DOWN ↑

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

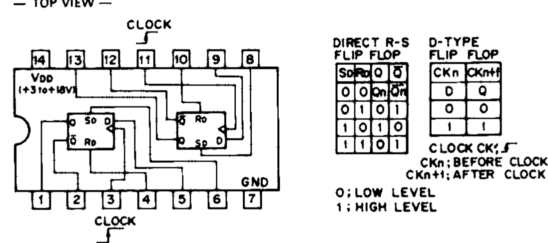
TC4512BP (TOSHIBA)
C-MOS 8-CHANNEL DATA SELECTOR/MULTIPLEXER
— TOP VIEW —



CONTROL INPUTS					OUTPUT
EN	INH	C	B	A	SC
0	0	0	0	0	S0
0	0	0	0	1	S1
0	0	0	1	0	S2
0	0	0	1	1	S3
0	0	1	0	0	S4
0	0	1	0	1	S5
0	0	1	1	0	S6
0	0	1	1	1	S7
0	1	X	X	X	GND
1	X	X	X	X	OPEN

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

TC504013BP (TOSHIBA)
C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
— TOP VIEW —



DIRECT R-S FLIP FLOP

SD	RD	Q	$\overline{Q}$
0	0	Qn	$\overline{Qn}$
0	1	0	1
1	0	1	0
1	1	0	1

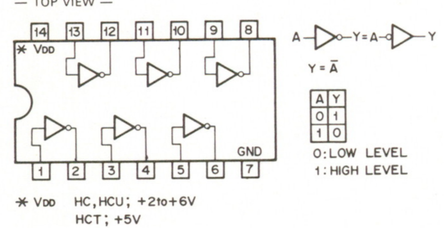
D-TYPE FLIP FLOP

CKn	CKn+1
D	Q
0	0
1	1

CLOCK CK; ↑
CKn; BEFORE CLOCK
CKn+1; AFTER CLOCK

0; LOW LEVEL
1; HIGH LEVEL

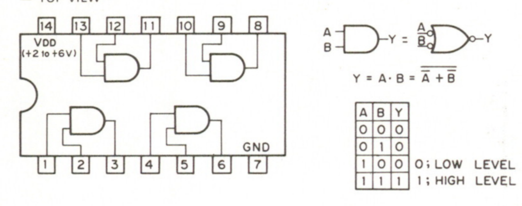
TC74HC04P (TOSHIBA)
TC74HCU04P (TOSHIBA)
C-MOS INVERTER
— TOP VIEW —



A	Y
0	1
1	0

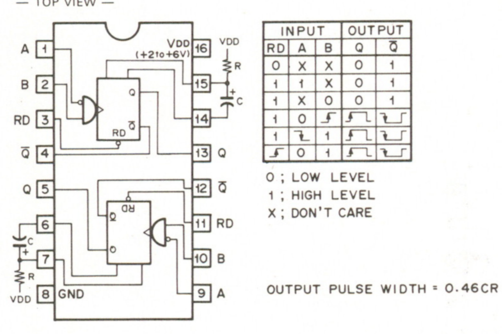
* VDD HC, HCU; +2 to +6V
HCT; +5V

TC74HC08P (TOSHIBA)
C-MOS 2-INPUT AND GATE
— TOP VIEW —



A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

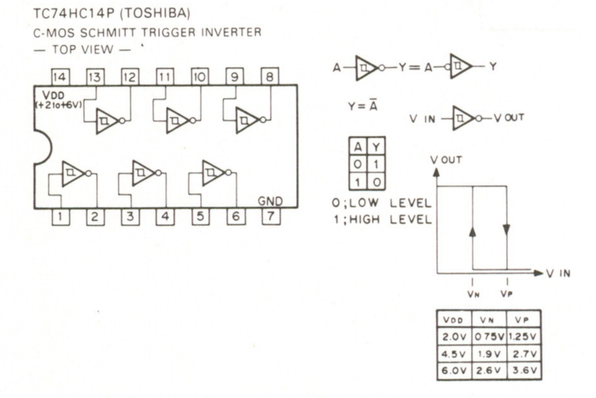
TC74HC123P (TOSHIBA)
C-MOS DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR
— TOP VIEW —



INPUT			OUTPUT	
RD	A	B	Q	$\overline{Q}$
0	X	X	0	1
1	1	X	0	1
1	X	0	0	1
1	0	↑	⎍	⊔
1	↓	1	⎍	⊔
↑	0	1	⎍	⊔

OUTPUT PULSE WIDTH = 0.46CR

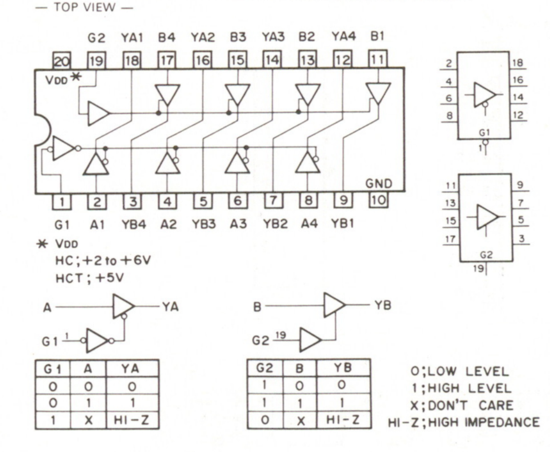
TC74HC14P (TOSHIBA)
C-MOS SCHMITT TRIGGER INVERTER
— TOP VIEW —



A	Y
0	1
1	0

VDD	VN	VP
2.0V	0.75V	1.25V
4.5V	1.9V	2.7V
6.0V	2.6V	3.6V

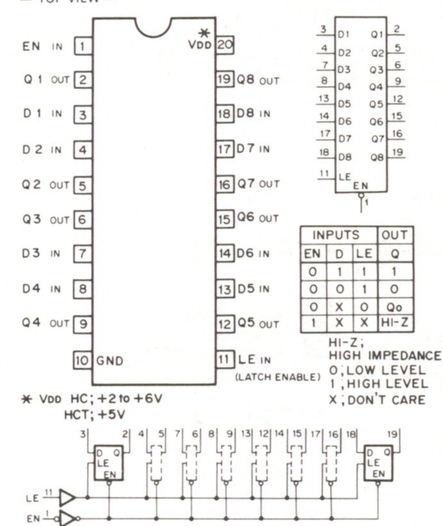
TC74HC241P (TOSHIBA)
C-MOS 3-STATE NONINVERTING BUFFER/LINE DRIVER/LINE RECEIVER
— TOP VIEW —



G1	A	YA
0	0	0
0	1	1
1	X	HI-Z

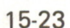
G2	B	YB
1	0	0
1	1	1
0	X	HI-Z

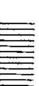
TC74HC373P (TOSHIBA)
C-MOS 3-STATE OUTPUTS OCTAL LATCHES
— TOP VIEW —



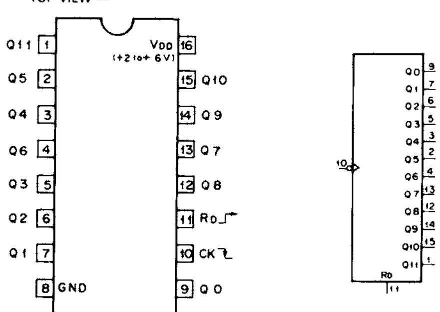
INPUTS			OUT
EN	D	LE	Q
0	1	1	1
0	0	1	0
0	X	0	Qo
1	X	X	HI-Z

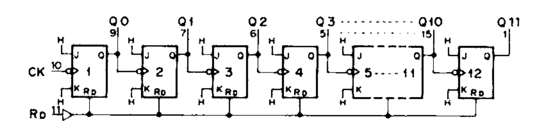
* VDD HC; +2 to +6V
HCT; +5V





TC74HC4040P (TOSHIBA)
C-MOS 12-STAGE RIPPLE CARRY BINARY COUNTER/DRIVER
— TOP VIEW —



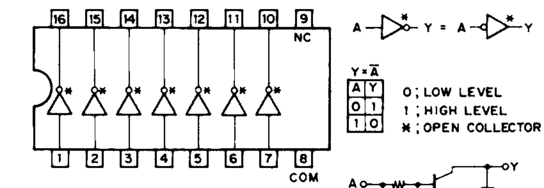


COUNT	Q11	Q10	Q9	Q8	Q7	Q6	Q5	Q4	Q3	Q2	Q1	Q0
0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	1	0
3	0	0	0	0	0	0	0	0	0	0	1	1
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
4095	1	1	1	1	1	1	1	1	1	1	1	1

RD	Q11 ······· Q0
1	ALL LOW
0	COUNT

0 ; LOW LEVEL
1 ; HIGH LEVEL

TD62503P (TOSHIBA)
TRANSISTOR ARRAY, INVERTING DRIVER WITH OPEN COLLECTOR
— TOP VIEW —



A —▷o* Y = A —o▷* Y

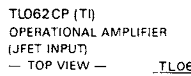
Y = $\bar{A}$

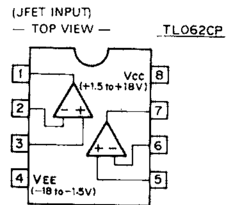
A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL
* ; OPEN COLLECTOR

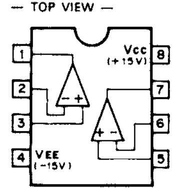
A — Y — COM

TL062CP (TI)
OPERATIONAL AMPLIFIER
(JFET INPUT)
— TOP VIEW — TL062CP

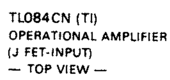


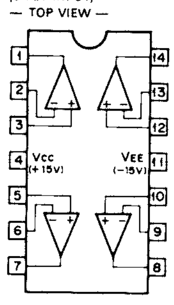


TL082CP (TI)
OPERATIONAL AMPLIFIER
(J FET-INPUT)
— TOP VIEW —

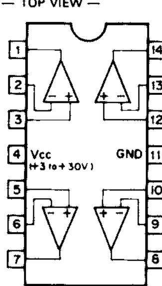


TL084CN (TI)
OPERATIONAL AMPLIFIER
(J FET-INPUT)
— TOP VIEW —

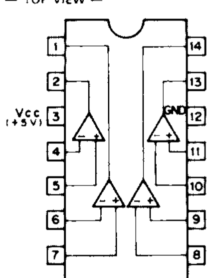


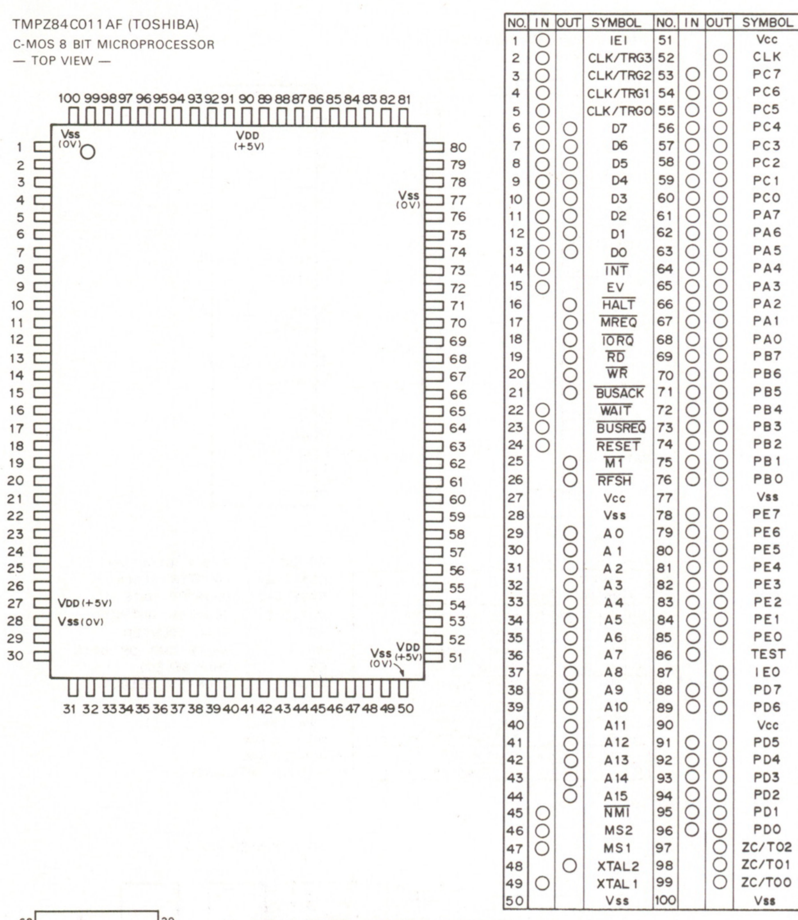


uPC324C (NEC)
QUAD. OP AMPLIFIER
— TOP VIEW —



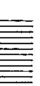
uPC339C (NEC)
COMPARATOR
— TOP VIEW —



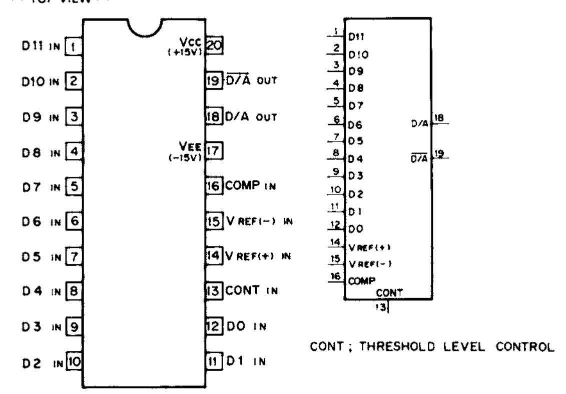


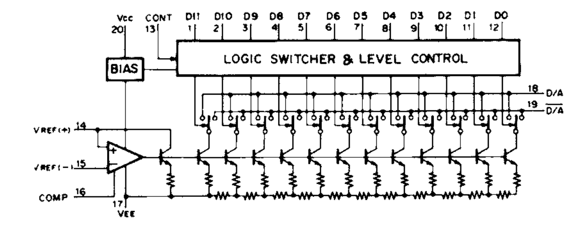
NO.	IN	OUT	SYMBOL	NO.	IN	OUT	SYMBOL
1	○		IEI	51			Vcc
2	○		CLK/TRG3	52		○	CLK
3	○		CLK/TRG2	53	○	○	PC7
4	○		CLK/TRG1	54	○	○	PC6
5	○		CLK/TRG0	55	○	○	PC5
6	○	○	D7	56	○	○	PC4
7	○	○	D6	57	○	○	PC3
8	○	○	D5	58	○	○	PC2
9	○	○	D4	59	○	○	PC1
10	○	○	D3	60	○	○	PC0
11	○	○	D2	61	○	○	PA7
12	○	○	D1	62	○	○	PA6
13	○	○	D0	63	○	○	PA5
14	○		INT	64	○	○	PA4
15	○		EV	65	○	○	PA3
16		○	HALT	66	○	○	PA2
17		○	MREQ	67	○	○	PA1
18		○	IORQ	68	○	○	PA0
19		○	RD	69	○	○	PB7
20		○	WR	70	○	○	PB6
21		○	BUSACK	71	○	○	PB5
22	○		WAIT	72	○	○	PB4
23	○		BUSREQ	73	○	○	PB3
24	○		RESET	74	○	○	PB2
25		○	M1	75	○	○	PB1
26		○	RFSH	76	○	○	PB0
27			Vcc	77			Vss
28			Vss	78	○	○	PE7
29		○	A0	79	○	○	PE6
30		○	A1	80	○	○	PE5
31		○	A2	81	○	○	PE4
32		○	A3	82	○	○	PE3
33		○	A4	83	○	○	PE2
34		○	A5	84	○	○	PE1
35		○	A6	85	○	○	PE0
36		○	A7	86	○		TEST
37		○	A8	87		○	IEO
38		○	A9	88	○	○	PD7
39		○	A10	89	○	○	PD6
40		○	A11	90			Vcc
41		○	A12	91	○	○	PD5
42		○	A13	92	○	○	PD4
43		○	A14	93	○	○	PD3
44		○	A15	94	○	○	PD2
45	○		NMI	95	○	○	PD1
46	○		MS2	96	○	○	PD0
47	○		MS1	97		○	ZC/TO2
48		○	XTAL2	98		○	ZC/TO1
49	○		XTAL1	99		○	ZC/TO0
50			Vss	100			Vss

A0–A15 ; 3-STATE ADDRESS BUS OUTPUTS
BUSACK ; BUS ACKNOWLEDGE OUTPUT
BUS REQ ; BUS REQUEST INPUT
CLK ; CLOCK OUTPUT
CLK/TRG0–3 ; EXTERNAL CLOCK / TIMER TRIGGER0–3 INPUTS
D0–D7 ; 3-STATE DATA BUS INPUTS/OUTPUTS
EV ; EVALUATER INPUT
HALT ; HALT OUTPUT
IEI/IEO ; CTC INTERRUPT ENABLE INPUT/OUTPUT
INT ; MASKABLE INTERRUPT REQUEST INPUT
IORQ ; 3-STATE I/O REQUEST OUTPUT
M1 ; 3-STATE MACHINE CYCLE 1 OUTPUT
MREQ ; 3-STATE REQUEST OUTPUT
MS1/MS2 ; MODE SELECT 1/2 INPUTS
NMI ; NON-MASKABLE INTERRUPT REQUEST INPUT
PA0–PA7 ; PB0–PB7 ; PC0–PC7 ; PD0–PD7 ; PE0–PE7 ; } 3-STATE I/O PORT
RD ; 3-STATE READ OUTPUT
RESET ; RESET INPUT
RFSH ; REFRESH OUTPUT
TEST ; TEST INPUT
WAIT ; WAIT REQUEST INPUT
WR ; 3-STATE WRITE OUTPUT
ZC/TO0–2 ; ZERO COUNT/TIME OUT 0–2 OUTPUTS

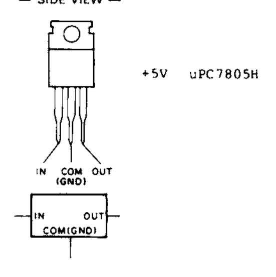


uPC648C (NEC)
12-BIT D/A CONVERTER WITH OPEN COLLECTOR OUTPUT
— TOP VIEW —

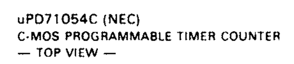


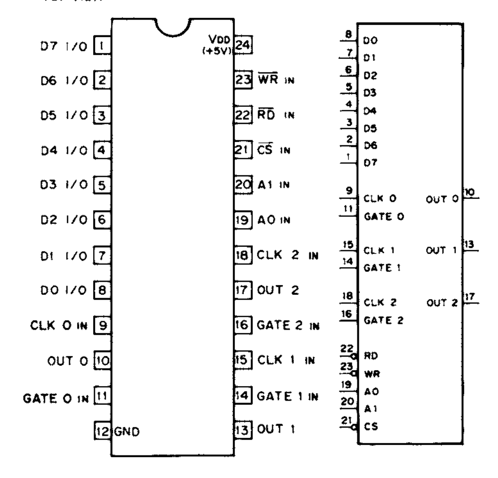


uPC78 ? ?H (NEC)
POSITIVE VOLTAGE REGULATOR (1A)
— SIDE VIEW —



+5V uPC7805H


uPD71054C (NEC)
C-MOS PROGRAMMABLE TIMER COUNTER
— TOP VIEW —

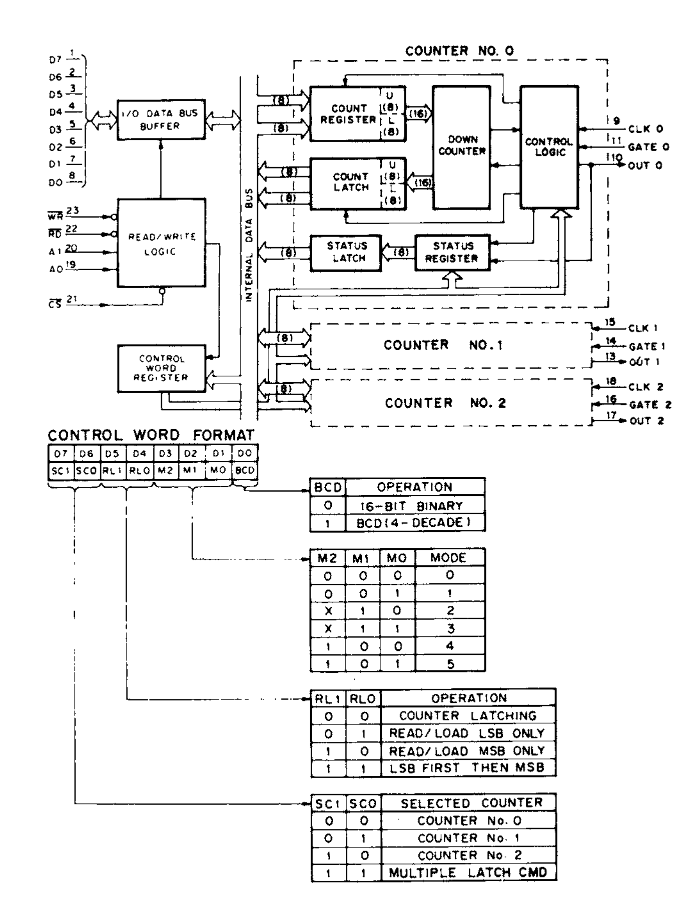


FUNCTION TABLE

INPUTS					FUNCTION
CS	RD	WR	A1	AO	
0	1	0	0	0	Load Counter No. 0
0	1	0	0	1	Load Counter No. 1
0	1	0	1	0	Load Counter No. 2
0	1	0	1	1	Control Word
0	0	1	0	0	Read Counter 0
0	0	1	0	1	Read Counter 1
0	0	1	1	0	Read Counter 2
0	0	1	1	1	No-Operation (HI-Z)
1	X	X	X	X	Disable (HI-Z)
0	1	1	X	X	No-Operation (HI-Z)

D7-DO ; 8-BIT DATA I/O
CLK 0-2 ; COUNTER CLOCK
GATE 0-2 ; COUNTER GATE
OUT 0-2 ; COUNTER OUTPUT
RD ; READ COUNTER
WR ; WRITE CMD OR DATA
CS ; CHIP SELECT
AO, A1 ; COUNTER SELECT

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE



CONTROL WORD FORMAT

D7	D6	D5	D4	D3	D2	D1	DO
SC1	SCO	RL1	RLO	M2	M1	MO	BCD

BCD	OPERATION
0	16-BIT BINARY
1	BCD(4-DECADE)

M2	M1	MO	MODE
0	0	0	0
0	0	1	1
X	1	0	2
X	1	1	3
1	0	0	4
1	0	1	5

RL1	RLO	OPERATION
0	0	COUNTER LATCHING
0	1	READ/LOAD LSB ONLY
1	0	READ/LOAD MSB ONLY
1	1	LSB FIRST THEN MSB

SC1	SCO	SELECTED COUNTER
0	0	COUNTER No. 0
0	1	COUNTER No. 1
1	0	COUNTER No. 2
1	1	MULTIPLE LATCH CMD

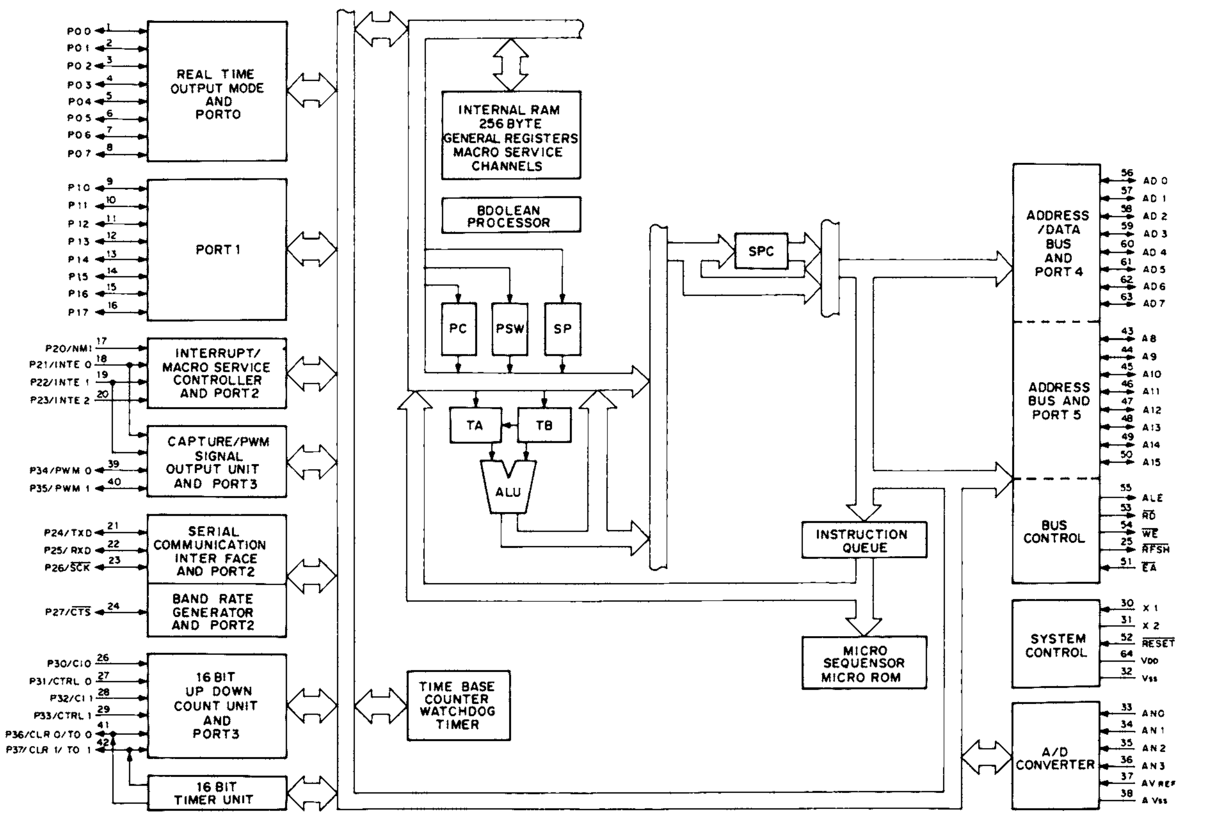
uPD78310CW (NEC)

C MOS 16/8 BIT ONE CHIP MICROCOMPUTER

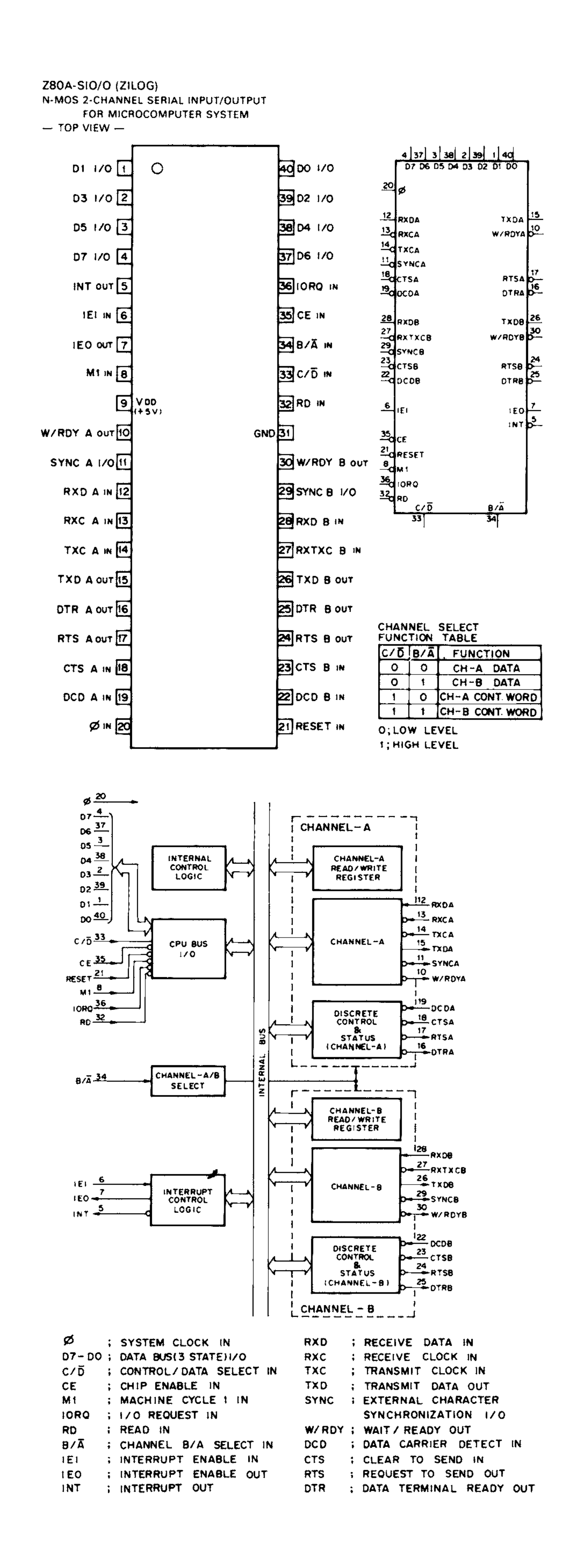
— TOP VIEW —

PIN NO	IN	OUT	SYMBOL	PIN NO	IN	OUT	SYMBOL
1	○	○	P00	33	○		AN0
2	○	○	P01	34	○		AN1
3	○	○	P02	35	○		AN2
4	○	○	P03	36	○		AN3
5	○	○	P04	37			A VREF
6	○	○	P05	38			A Vss
7	○	○	P06	39	○	○	P34/PWM0
8	○	○	P07	40	○	○	P35/PWM1
9	○	○	P10	41	○	○	P36/CLR0/TO0
10	○	○	P11	42	○	○	P37/CLR1/TO1
11	○	○	P12	43	○	○	A8
12	○	○	P13	44	○	○	A9
13	○	○	P14	45	○	○	A10
14	○	○	P15	46	○	○	A11
15	○	○	P16	47	○	○	A12
16	○	○	P17	48	○	○	A13
17	○		P20/NMI	49	○	○	A14
18	○		P21/INTE0	50	○	○	A15
19	○		P22/INTE1	51	○		EA
20	○		P23/INTE2	52	○		RESET
21	○	○	P24/TxD	53		○	RD
22	○	○	P25/RxD	54		○	WR
23	○	○	P26/SCK	55		○	ALE
24	○	○	P27/CTS	56	○	○	AD0
25		○	RFSH	57	○	○	AD1
26	○		P30/CI0	58	○	○	AD2
27	○		P31/CTRL0	59	○	○	AD3
28	○		P32/CI1	60	○	○	AD4
29	○		P33/CTRL1	61	○	○	AD5
30	○		X1	62	○	○	AD6
31			X2	63	○	○	AD7
32			Vss	64			VDD


```
A8-A15        ; ADDRESS BUS OUT
AD0-AD7       ; ADDRESS/DATA BUS IN/OUT
ALE           ; ADDRESS LATCH ENABLE OUT
AN0-AN3       ; ANALOG SIGNAL IN
CI0,CI1       ; EXTERNAL COUNT CLOCK IN
CLR0,CLR1     ; COUNTER CLEAR/CAPTURE TRIGGER IN
CTRL0,CTRL1;  COUNT UP/DOWN SELECT CONTROL IN
CTS           ; ASYNCHRONOUS MODE; TRANSMIT PERMISSION
                                   CONTROL IN
                I/O INTERFACE MODE; RECEIVER CLOCK IN/OUT
EA            ; EXTERNAL ACCESS IN
INTE0-INTE2;  EXTERNAL INTERRUPT REQUEST IN
NMI           ; NON MASKABEL INTERRUPT REQUEST IN
P00-P07       ; PORT 0 (3 STATE) IN/OUT
P10-P17       ; PORT 1 (3 STATE) IN/OUT
P20-P27       ; PORT 2 (3 STATE) IN/OUT
P30-P37       ; PORT 3 (3 STATE) IN/OUT
PWM0,PWM1     ; PWM OUT
RD            ; READ STROBE OUT
RESET         ; RESET IN
RFSH          ; REFLESH OUT
RXD           ; SERIAL DATA OUT
SCK           ; I/O INTERFACE MODE; RECEIVER CLOCK OUT
TO0,TO1       ; PULSE OUT
TXD           ; SERIAL DATA IN
WR            ; WRITE STROBE OUT
X1,X2         ; CRYSTAL
```



Z80A-SIO/O (ZILOG)
N-MOS 2-CHANNEL SERIAL INPUT/OUTPUT
FOR MICROCOMPUTER SYSTEM
— TOP VIEW —

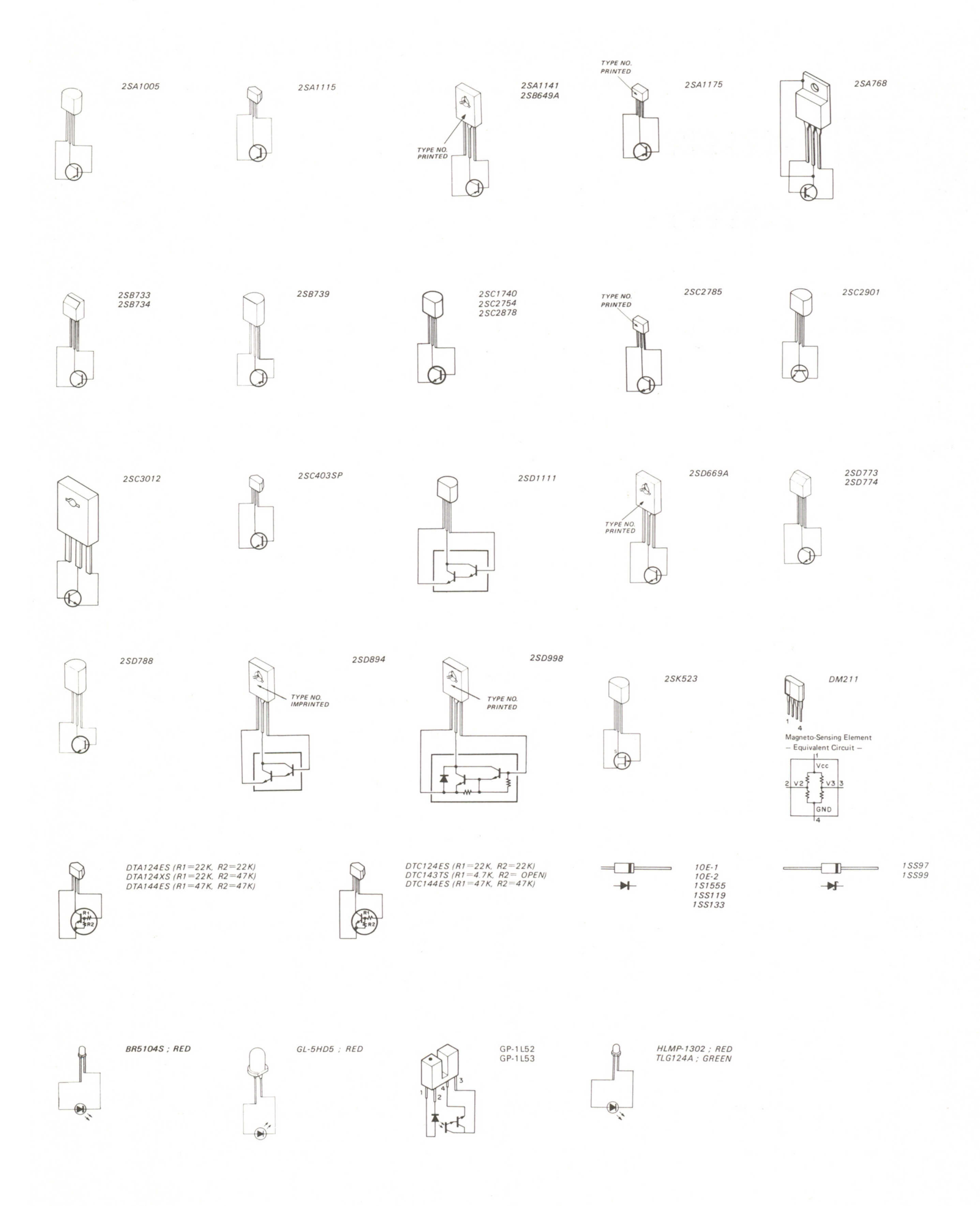


CHANNEL SELECT FUNCTION TABLE

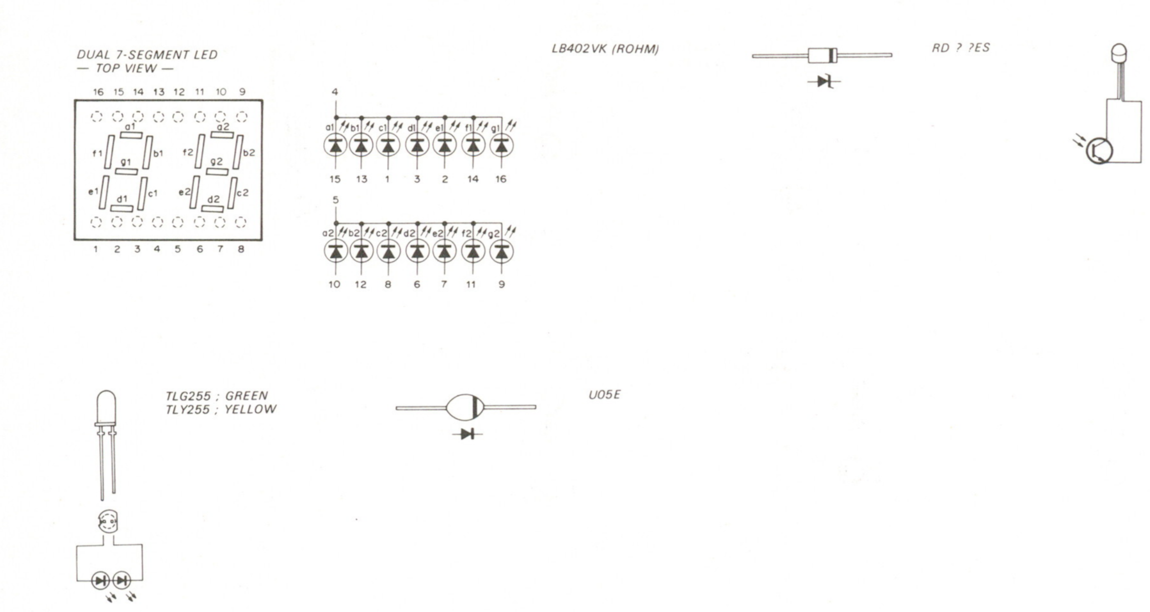
C/D̄	B/Ā	FUNCTION
0	0	CH-A DATA
0	1	CH-B DATA
1	0	CH-A CONT. WORD
1	1	CH-B CONT. WORD

0; LOW LEVEL
1; HIGH LEVEL

Ø ; SYSTEM CLOCK IN
D7-D0 ; DATA BUS(3 STATE) I/O
C/D̄ ; CONTROL/DATA SELECT IN
CE ; CHIP ENABLE IN
M1 ; MACHINE CYCLE 1 IN
IORQ ; I/O REQUEST IN
RD ; READ IN
B/Ā ; CHANNEL B/A SELECT IN
IEI ; INTERRUPT ENABLE IN
IEO ; INTERRUPT ENABLE OUT
INT ; INTERRUPT OUT
RXD ; RECEIVE DATA IN
RXC ; RECEIVE CLOCK IN
TXC ; TRANSMIT CLOCK IN
TXD ; TRANSMIT DATA OUT
SYNC ; EXTERNAL CHARACTER SYNCHRONIZATION I/O
W/RDY ; WAIT/READY OUT
DCD ; DATA CARRIER DETECT IN
CTS ; CLEAR TO SEND IN
RTS ; REQUEST TO SEND OUT
DTR ; DATA TERMINAL READY OUT



2SA1005
2SA1115
2SA1141
2SB649A
TYPE NO. PRINTED
2SA1175
2SA768
2SB733
2SB734
2SB739
2SC1740
2SC2754
2SC2878
2SC2785
2SC2901
2SC3012
2SC403SP
2SD1111
2SD669A
2SD773
2SD774
2SD788
2SD894
TYPE NO. IMPRINTED
2SD998
2SK523
DM211
Magneto-Sensing Element
– Equivalent Circuit –
Vcc
V2
V3
GND
DTA124ES (R1=22K, R2=22K)
DTA124XS (R1=22K, R2=47K)
DTA144ES (R1=47K, R2=47K)
DTC124ES (R1=22K, R2=22K)
DTC143TS (R1=4.7K, R2= OPEN)
DTC144ES (R1=47K, R2=47K)
10E-1
10E-2
1S1555
1SS119
1SS133
1SS97
1SS99
BR5104S ; RED
GL-5HD5 ; RED
GP-1L52
GP-1L53
HLMP-1302 ; RED
TLG124A ; GREEN


DUAL 7-SEGMENT LED
— TOP VIEW —
16 15 14 13 12 11 10 9
a1 b1 c1 d1 e1 f1 g1
a2 b2 c2 d2 e2 f2 g2
1 2 3 4 5 6 7 8
4
15 13 1 3 2 14 16
5
10 12 8 6 7 11 9
LB402VK (ROHM)
RD ? ?ES
SPS102
TLG255 ; GREEN
TLY255 ; YELLOW
U05E

SECTION 16
SCHEMATIC DIAGRAMS

回路図内において、REF. NO の近傍に下記記号が記載されていますが、これは生産時の部品データです。

In the schematic diagrams, the following marks are described nearby reference number. These are parts data at factory.

CAPACITOR (C)

AL, AS	ELECTROLYTIC
TA	TANTALUM
CA, CC, CCS, CM, CS	CERAMIC
MPS, PP, PS, PT	MYLAR
MD	DIPPED MICA
MS	MICA

RESISTOR (R)
VARIABLE RESISTOR (RV)

RC, RD	CARBON
RF	FUSE
RN, RS	METAL
RW	WIREWOUND

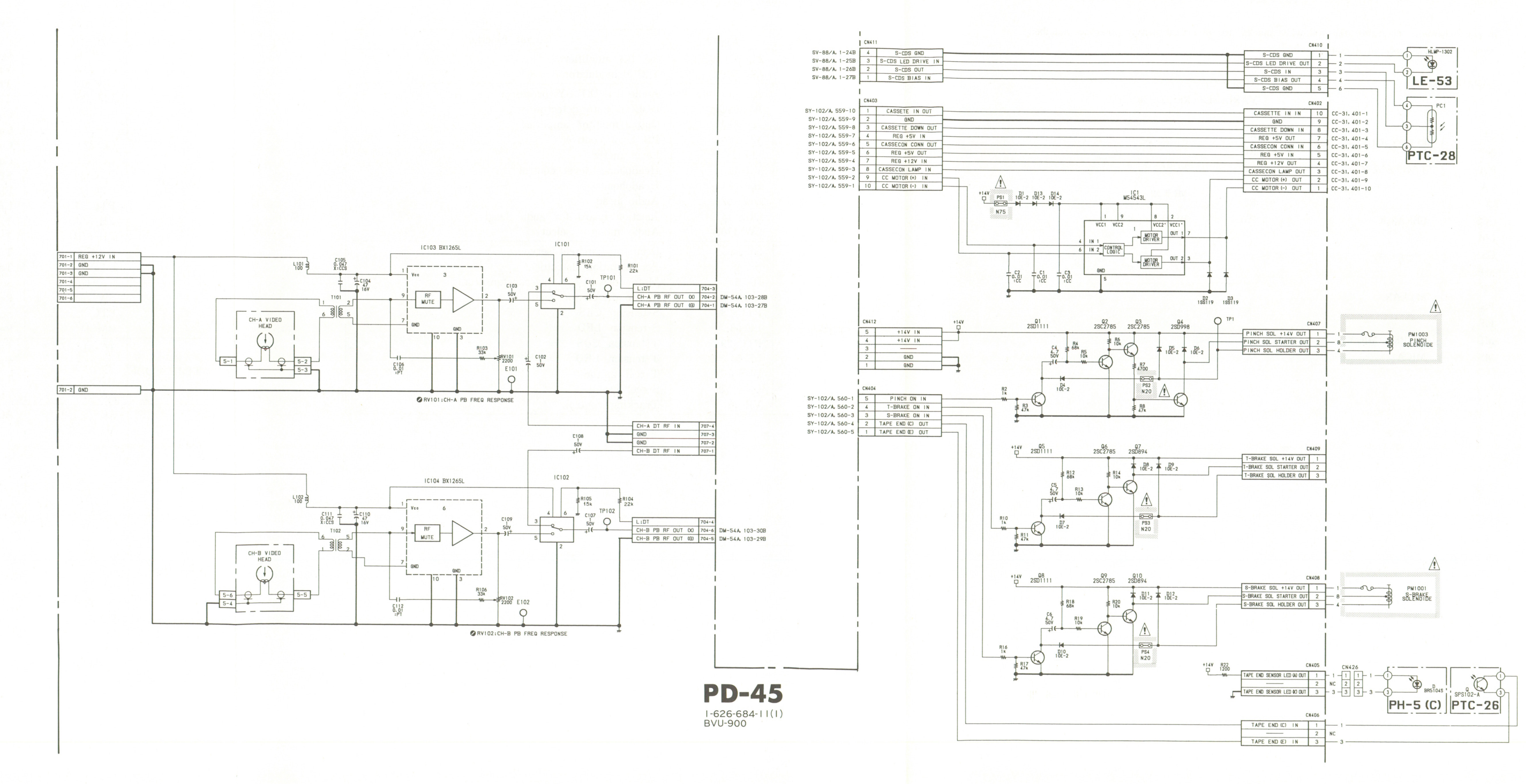
The circuit information is provided below.

System	Board	Circuit function
VIDEO	PD-45	RF PB amplifier
	DM-54A	Y/C demodulator
AUDIO	AP-23	Audio PB/DOLBY processor
	AU-85C	DOLBY auto detector
	AU-87A	Output/monitor amplifier
	VR-76	PB level control
	MT-28	Level meter
	VR-49	Headphones level control
	HP-28	Headphones
	DUS-92	Audio head
	DUS-147	Junction board for audio head
	SW-170B	Audio monitor select
SERVO	SV-88C	Drum/capstan/reel servo
	SE-48	Reel rotation detector
	DR-53	Motor driver for reel/capstan/drum
	DR-59	Motor driver for reel
	PTC-28	S-tension CdS
	LE-53	S-tension LED
	PTC-29	T-tension CdS
	LE-54	T-tension LED
	DUS-177	T-reel motor
	DUS-178	S-reel motor
	VR-76	Tracking control

System	Board	Circuit function
SYSCON	SY-102B	System control
	KY-144A	Function key board
	DP-62	Display
	BC-11A	Video/audio timing control
	HN-80A	Threading motor driver
	LM-13	Threading motor
	PD-45	Cassette-up compartment motor driver/Solenoid driver
	CC-31	Cassette compartment driver
	CC-32	Cassette in detector
	CC-33	Cassette down detector
	PTC-30	SP, KCA detector
	PTC-33	FR stop detector
	PTC-34	Unthread end detector
	PH-5(A)	Tape top LED
	PH-5(B)	Tape top sensor
	PH-5(C)	Tape end LED
	PTC-26	Tape end sensor
	SW-170B	Select switch /warning indicator
	SW-290	Remote 1/2 Select /TBC ON/OFF /Character ON/OFF
	PTC-32	Search dial
	RM-44	Remote control (9pin & 24pin)
TIME CODE	TC-51	Time code/Character generator
	BC-11A	Time code PB amplifier
	HN-84	Time code head
	SW-290	Time code control Switch
POWER	AC-78	AC primary circuit
	M1	Switching Regulator (UR-21)
	M2	Switching Regulator (UR-21)
	C1	Switching Regulator (UR-21)
	C2	Switching Regulator (UR-21)
OTHERS	MB-127A	Mother board
	MB-139	Sub mother for TC
	CP-109A	Connector pannel
	RM-45	TBC remote control
	AC-78	AC primary circuit
	EX-127	Extention board for audio/time code
	EX-128	Extention board for video/servo/TBC
	HN-80A	Relay board for video/tape sensor/thread motor drive
	HN-83	Relay board for time code head
	LP-41	Cassette compartment light
	TBC-5	Time base corrector (Option)
	DUS-151	Connection (Option)

LE-53, PD-45, PH-5(C), PTC-26, PTC-28 LE-53, PD-45, PH-5(C), PTC-26, PTC-28


LE-53; S-TENSION LED
PD-45; RF PB AMPLIFIER/CASSETTE-UP COMPARTMENT MOTOR DRIVER/SOLENOID DRIVER
PH-5(C); TAPE END LED
PTC-26; TAPE END SENSOR
PTC-28; S-TENSION CdS



NOTE:

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

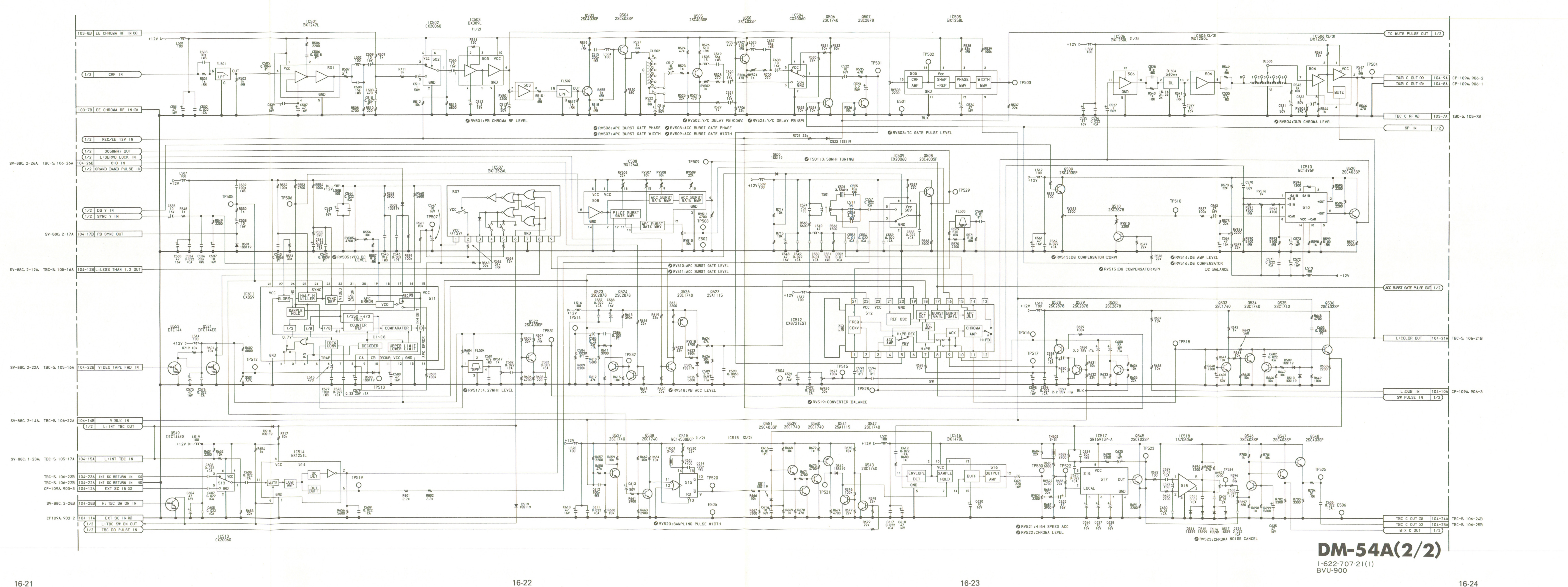
DM-54A(1/2); Y/C DEMODULATOR



DM-54A(1/2)

1-622-707-21(1)
BVU-900

DM-54A(2/2); Y/C DEMODULATOR

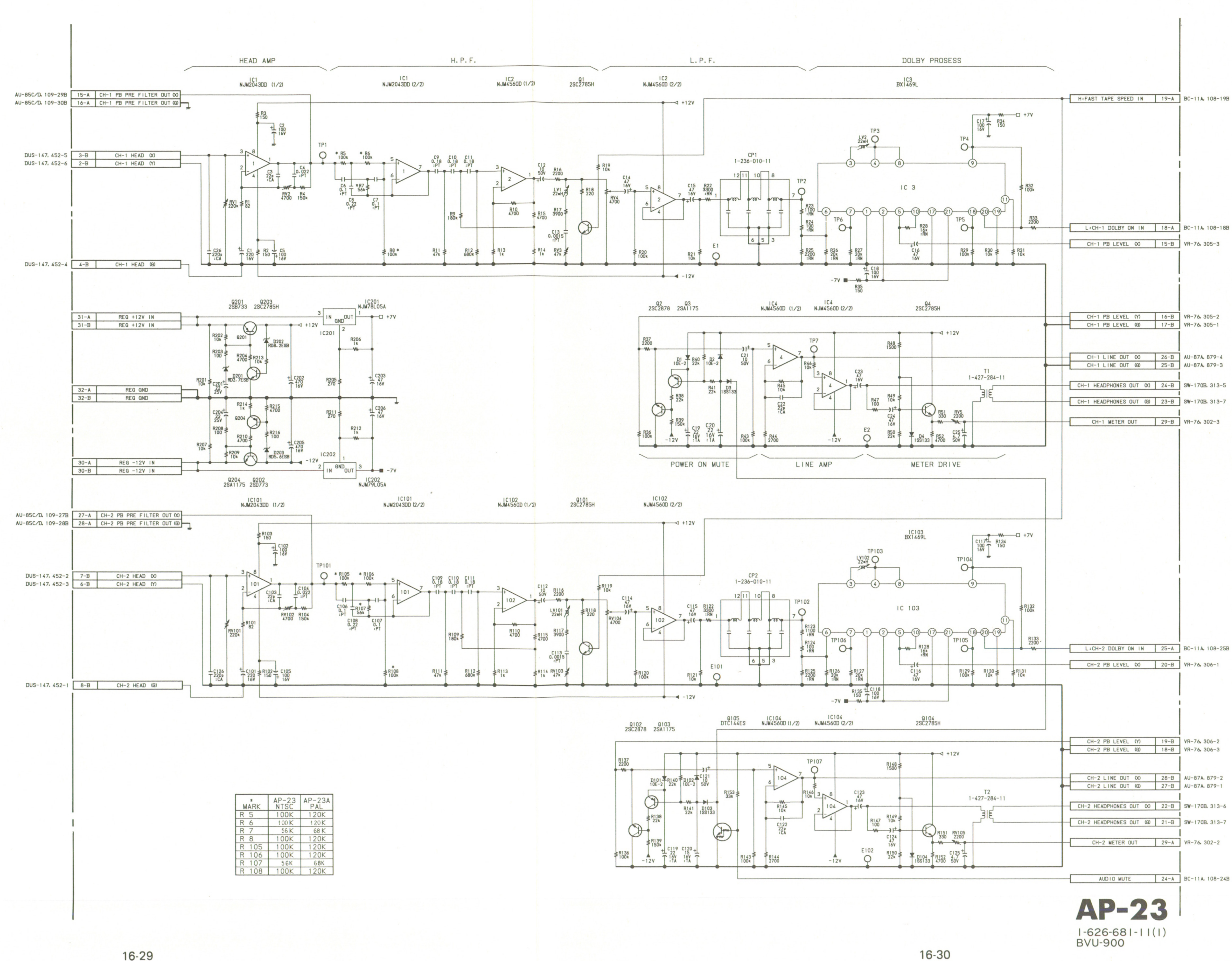


DM-54A(2/2)

1-622-707-21(1)

BVU-900

AP-23; AUDIO PB/DOLBY PROCESSOR



* MARK	AP-23 NTSC	AP-23A PAL
R 5	100K	120K
R 6	100K	120K
R 7	56K	68K
R 8	100K	120K
R 105	100K	120K
R 106	100K	120K
R 107	56K	68K
R 108	100K	120K

AP-23
1-626-681-11(1)
BVU-900

A B C D E F G H

AU-85C; DOLBY AUTO DETECTOR

PILOT TONE GEN
PHASAE SHIFTER
CH-1 L.P.F
CH-1 COMPARATOR
DOLBY DET
CH-2 L.P.F
CH-2 COMPARATOR
CH-1 INH DET
CH-2 INH DET

SV-88C, 102-7B — 31B PB CTL IN
BC-11A, 108-14A — 14B H:AUTO DET OUT
AP-23, 107-15A — 29B CH-1 PB PRE FILTER IN(0)
BC-11A, 108-15AB — 15A REG +12V IN; 15B REG +12V OUT
BC-11A, 108-16AB — 16A REG GND; 16B REG GND
BC-11A, 108-17AB — 17A REG -12V IN; 17B REG -12V OUT
AP-23, 107-27A — 27B CH-2 PB PRE FILTER IN(0)
BC-11A, 108-10B — 11B H:INH OUT

RV2:PB PILOT TONE PHASE
RV3:CH-1 PB PILOT TONE LEVEL
RV4:CH-1 PILOT TONE DET DC BALANCE
RV5 DOLBY DET LEVEL
RV6:CH-2 PB PILOT TONE LEVEL
RV7:CH-2 PILOT TONE DET DC BALANCE
RV10:DET LEVEL
RV11:DET LEVEL

* MARK	AU-85C NTSC	AU-85D PAL
R61	100K	120K
R62	100K	120K
R65	100K	120K
R66	100K	120K
R63	56K	68K
R67	56K	68K
R83	100K	120K
R82	100K	120K

AU-85C
1-622-702-31(1)
BVU-900

AU-87A; OUTPUT/MONITOR AMPLIFIER

1

2

3

4

5

870-1 REG +12V
870-2 REG +12V
870-3 GND
870-4 GND
870-5 REG -12V
870-6 REG -12V

AP-23, 107-26B 879-4 CH-1 LINE IN (X)
AP-23, 107-25B 879-3 CH-1 LINE IN (G)
AP-23, 107-28B 879-2 CH-2 LINE IN (X)
AP-23, 107-27B 879-1 CH-2 LINE IN (G)

RV1; AUDIO OUT CH-1 LEVEL
RV2; AUDIO OUT CH-2 LEVEL
RV3; MONITOR OUT LEVEL

IC102 TC4051BP

CH-1 LINE OUT (Y) 874-1
CH-1 LINE OUT (X) 874-2
CH-1 LINE OUT (G) 874-3
CN929 AUDIO OUT CH-1/L LINE

CH-2 LINE OUT (Y) 875-1
CH-2 LINE OUT (X) 875-2
CH-2 LINE OUT (G) 875-3
CN930 AUDIO OUT CH-2/R LINE

MONITOR OUT (X) 876-1
MONITOR OUT (Y) 876-2
MONITOR OUT (G) 876-3
CN931 AUDIO OUT MONITOR

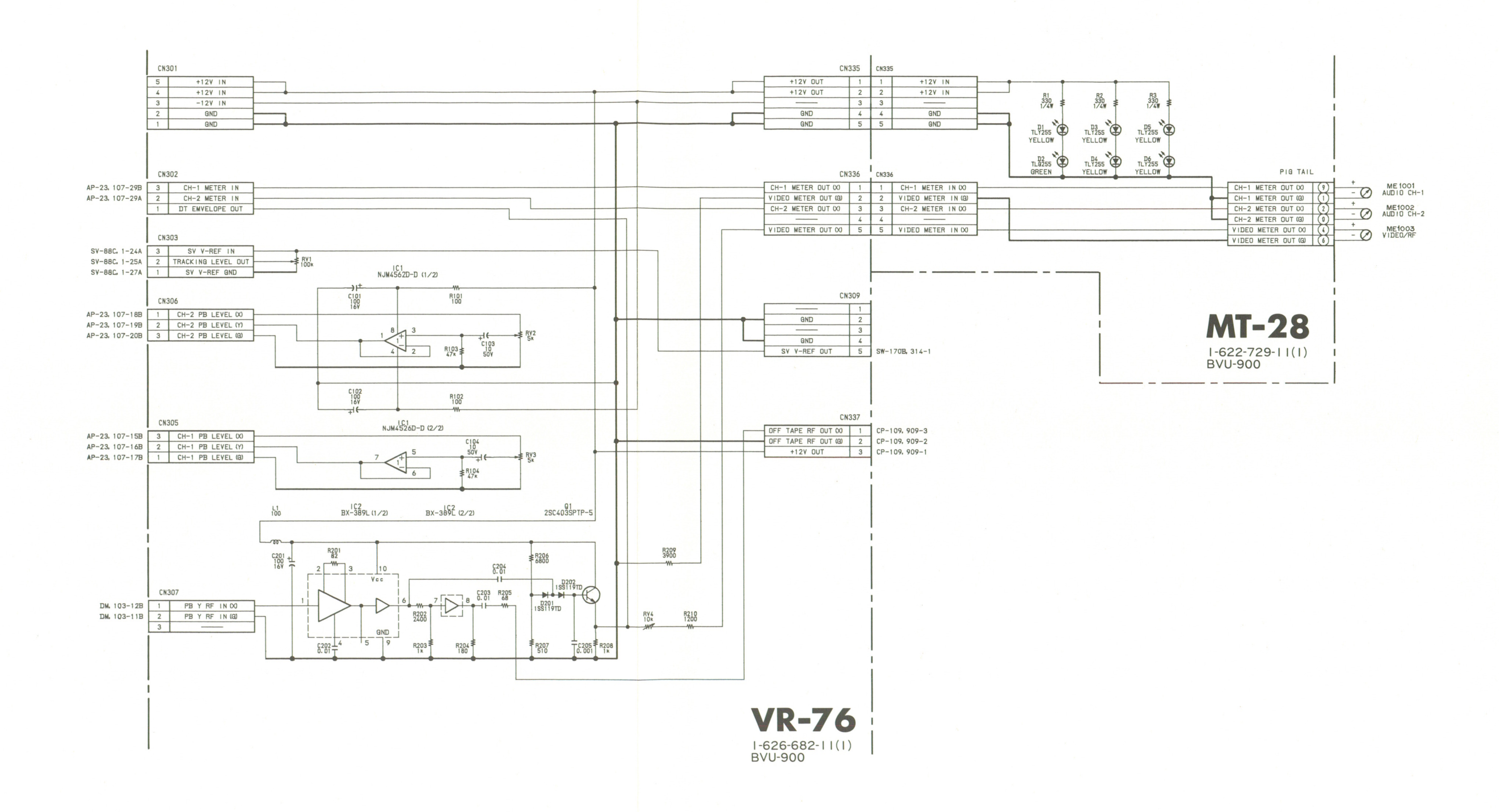
MONITOR CONTROL 1 IN 877-2 SW-170B, 312-3
MONITOR CONTROL 2 IN 877-1 SW-170B, 312-2
L; FRAMING ENABLE OUT 877-3 SW-170B, 312-1

AUDIO MONITOR OUT (X) 878-1 CP-109A, 911-3
L; FRAMING ENABLE IN 878-1 CP-109A, 911-1
AUDIO MONITOR OUT (G) 878-2 CP-109A, 911-2

AU-87A
1-622-703-21(1)
BVU-900

A B C D E F G H I J K L

MT-28; LEVEL METER
VR-76; PB LEVEL/TRACKING CONTROL

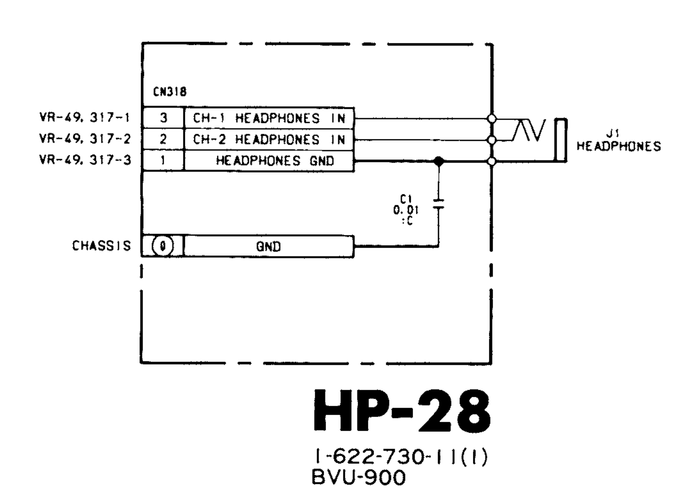


A | B | C | D | E | F | G | H

HP-28; HEADPHONES
VR-49; HEADPHONES LEVEL CONTROL

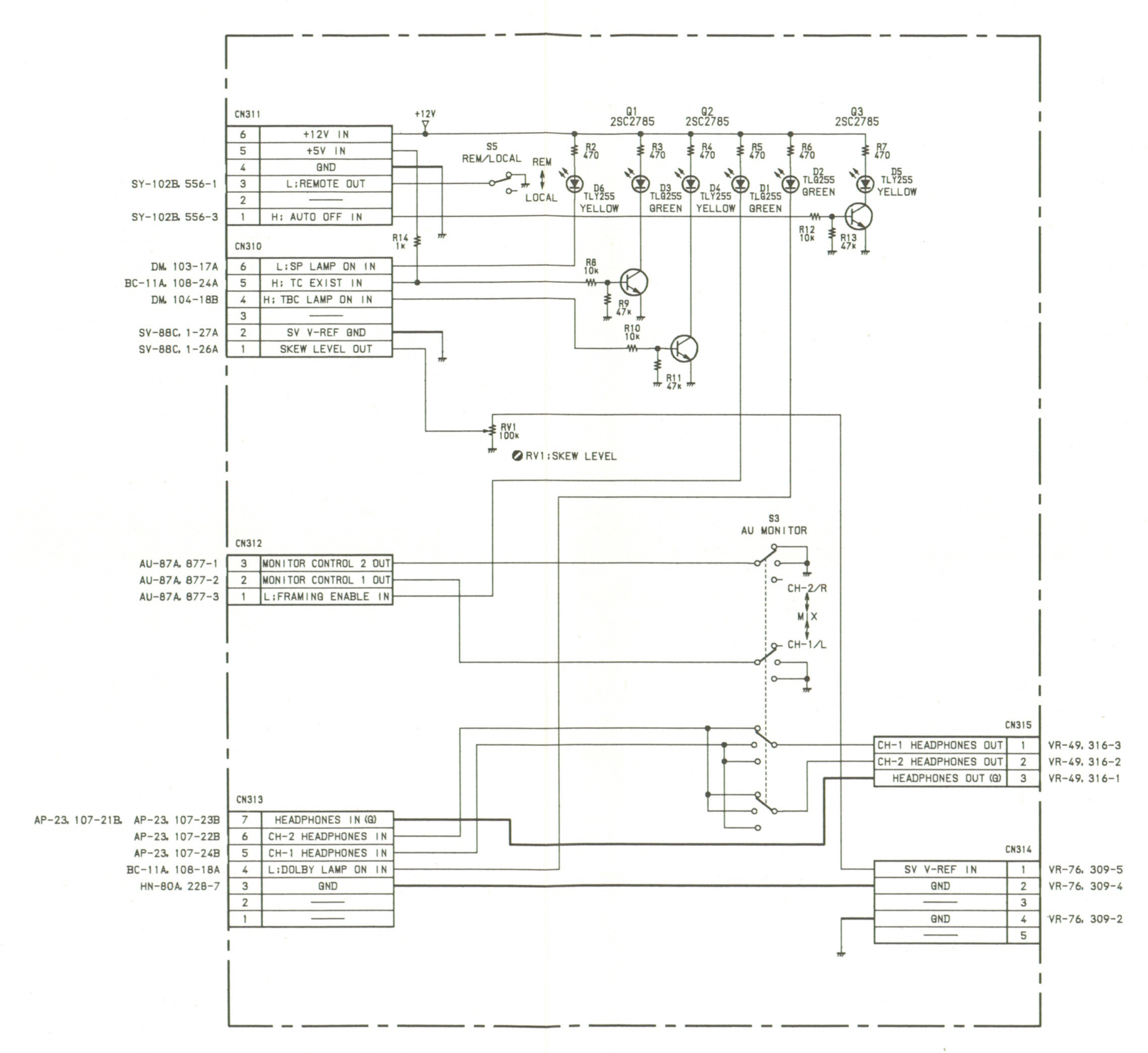
CN316
SW-170, 315-1 | 3 | CH-1 HEADPHONES IN
SW-170, 315-2 | 2 | CH-2 HEADPHONES IN
SW-170, 315-3 | 1 | HEADPHONES IN (G)
R1 120
RV1 500X2
RV1 : HEADPHONES LEVEL
R2 120
CN317
CH-1 HEADPHONES OUT | 1 | HP-28, 318-3
CH-2 HEADPHONES OUT | 2 | HP-28, 318-2
HEADPHONES IN (G) | 3 | HP-28, 318-1

VR-49
1-622-731-11(1)
BVU-900



HP-28
1-622-730-11(1)
BVU-900

SW-170B; AUDIO MONITOR SELECT/SELECT SWITCH/WARNING INDICATOR

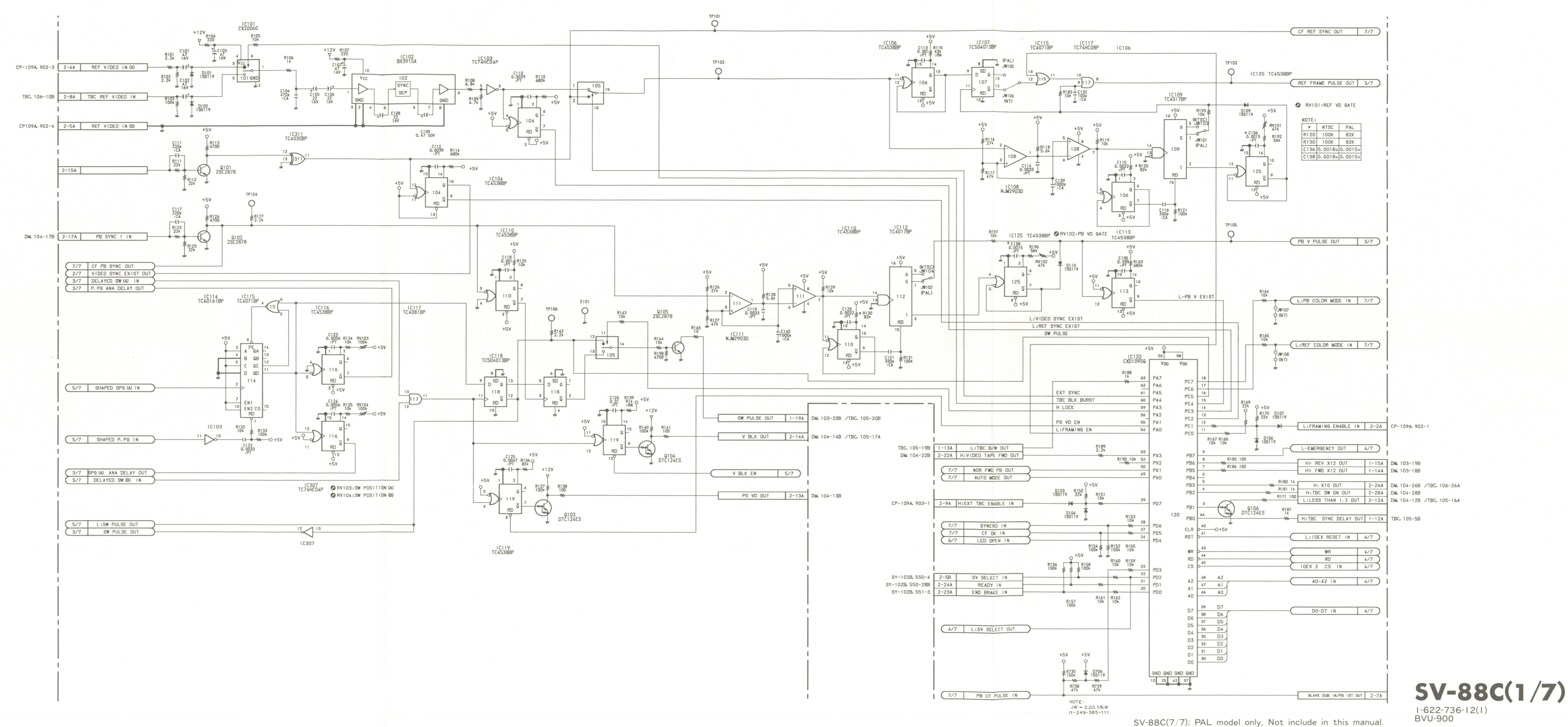


SW-170B

1-622-737-12(1)
BVU-900

A B C D E F G H

SV-88C(1/7); SYNC SEPARATOR



SV-88C(7/7): PAL model only, Not include in this manual.

SV-88C(1/7)
1-622-736-12(1)
BVU-900

SV-88C(2/7); CTL REC/PB AMPLIFIER

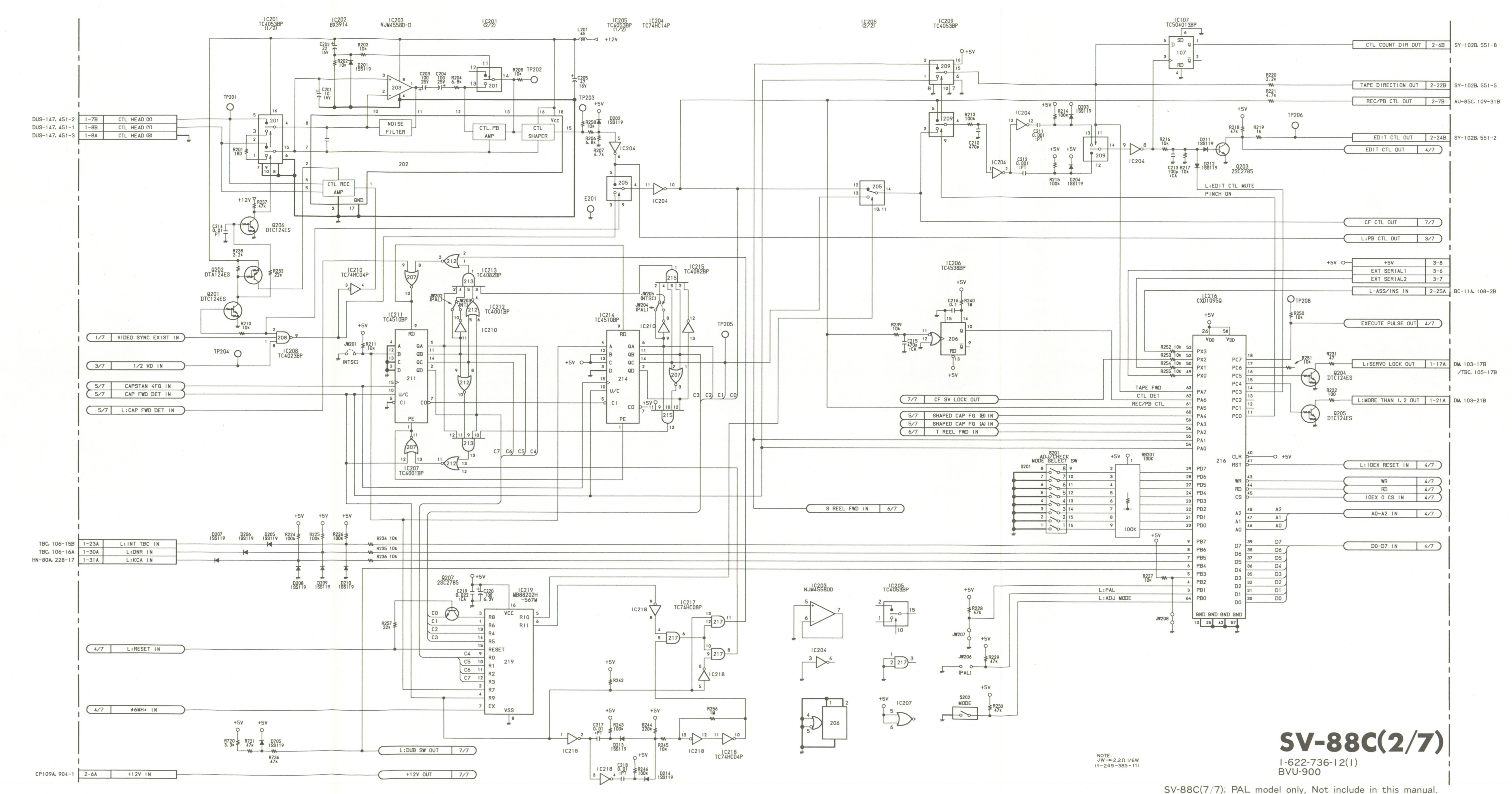
1

2

3

4

5



SV-88C(2/7)
1-622-736-12(1)
BVU-900

SV-88C(7/7); PAL model only, Not include in this manual.

SV-88C(3/7); SERVO TIMER/CLOCK COUNTER

SV-88C(3/7)

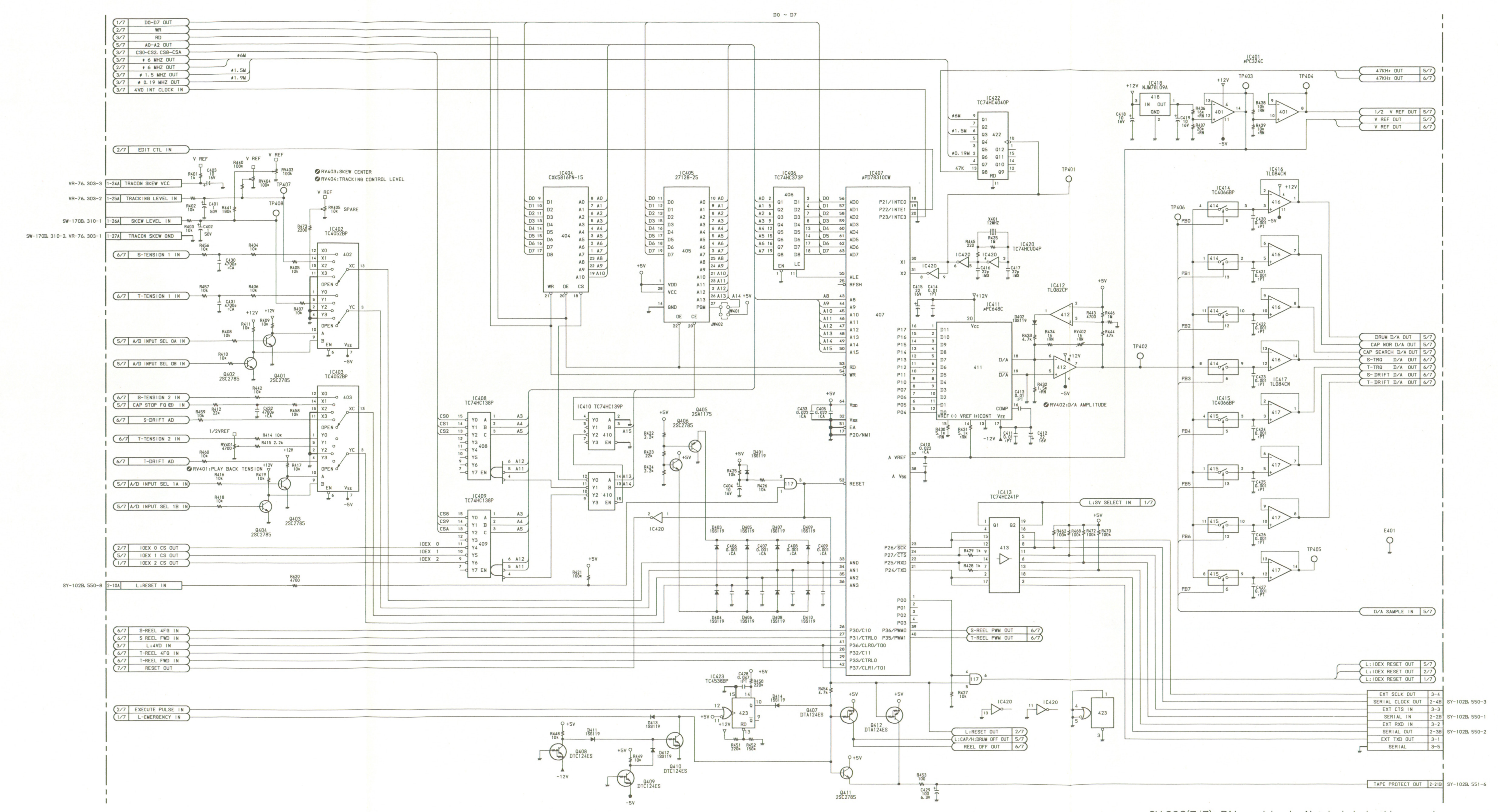
1-622-736-12(1)
BVU-900

SV-88C(7/7); PAL model only, Not include in this manual.

1 2 3 4 5

A B C D E F G H I J K L

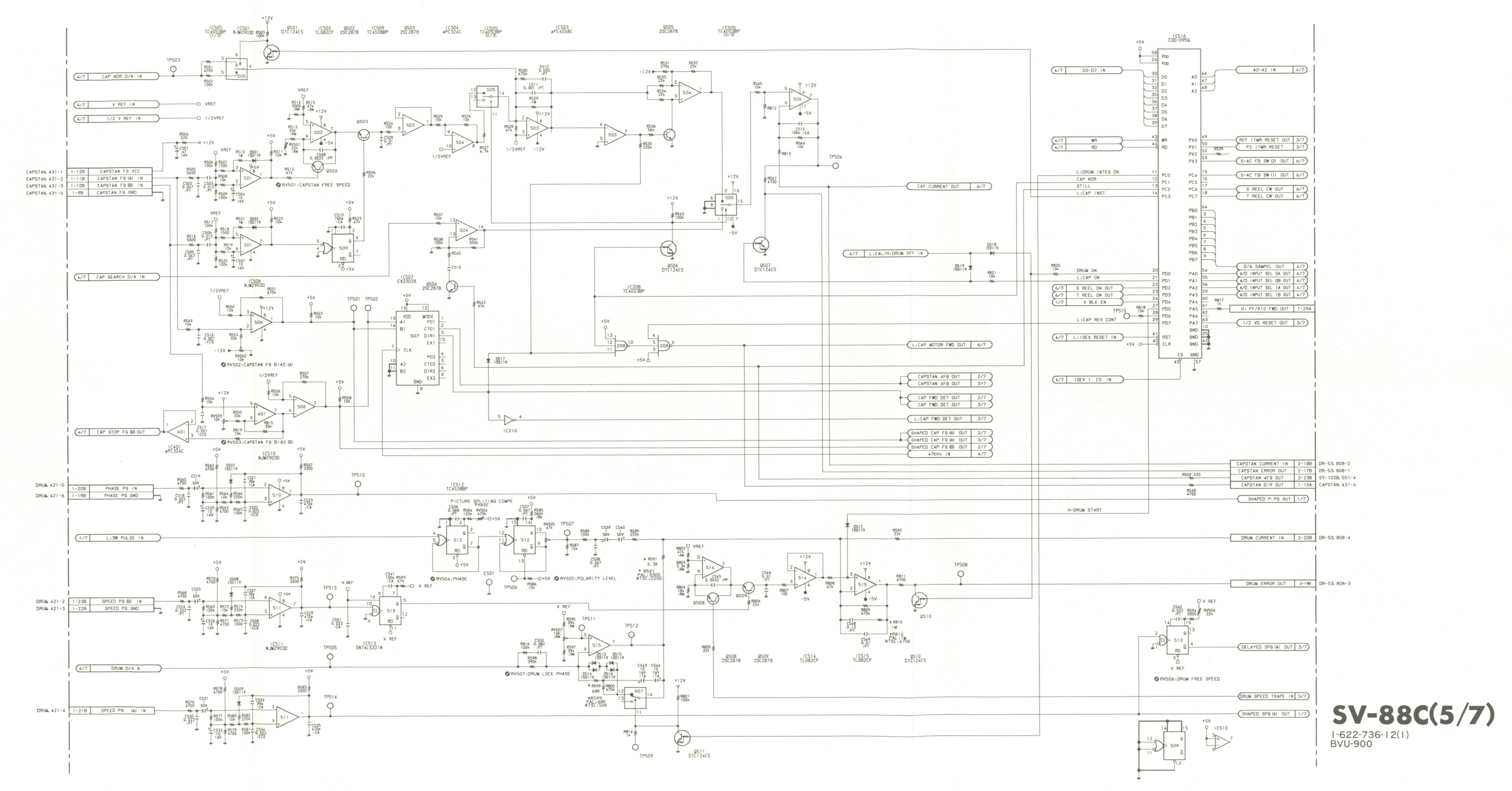
SV-88C(4/7); DRUM/CAPSTAN DATA CONTROL



SV-88C(7/7); PAL model only, Not include in this manual

SV-88C(4/7)
1-622-736-12(1)
BVU-900

SV-88C(5/7); DRUM/CAPSTAN PWM SERVO

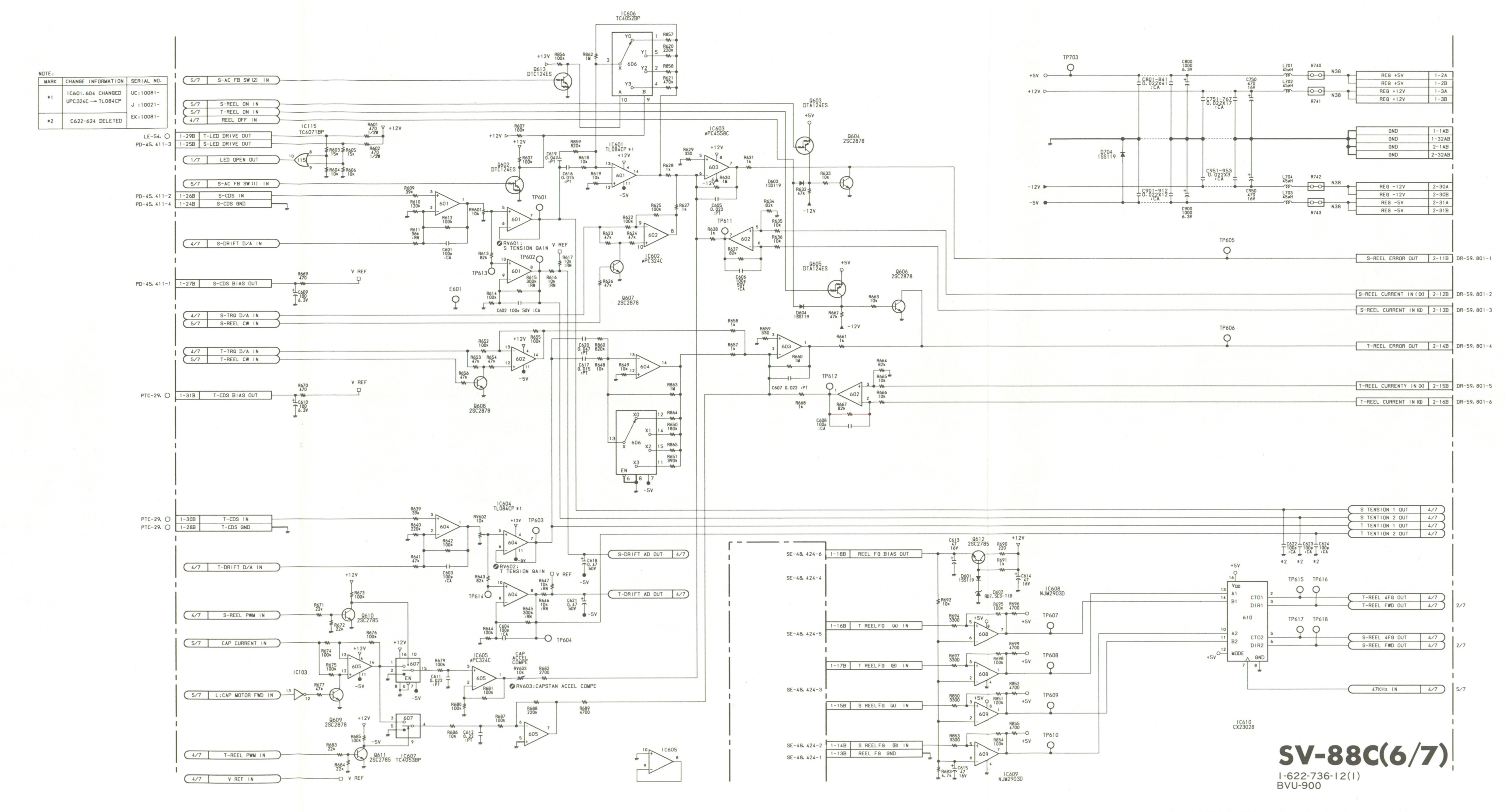


SV-88C(5/7)

1-622-736-12(1)
BVU-900

SV-88C(7/7); PAL model only, Not include in this manual.

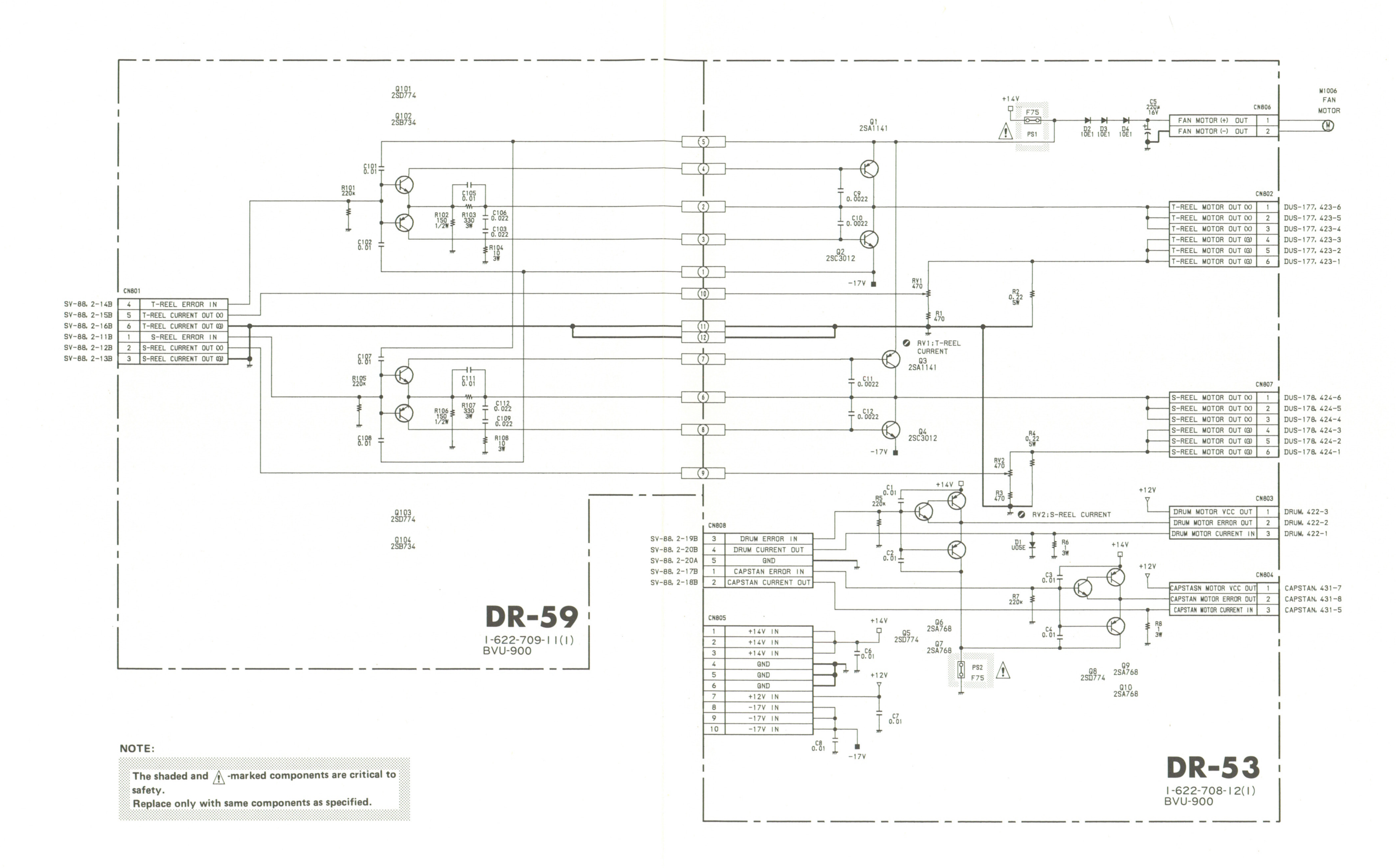
SV-88C(6/7); REEL SERVO



SV-88C(7/7); PAL model only, Not include in this manual.


SE-48; REEL ROTATION DETECTOR

DR-53; REEL/CAPSTAN/DRUM MOTOR DRIVE
DR-59; REEL MOTOR DRIVE



A B C D E F G H

SY-102B; SYSTEM CONTROL



SY-102B
1-622-734-13(1)
BVU-900

KY-144A, DP-62 KY-144A, DP-62

KY-144A; FUNCTION KEY BOARD
DP-62; DISPLAY

DP-62
1-622-733-12(1)
BVU-900

REF NO	TYPE	GND	+5V
IC1	M50747-601SP	32	1
IC2	M54516P	7	1, 14
IC3	M54516P	7	1, 14
IC4	M54516P	7	
IC5	M54562P	10	
IC6	μPC7805H	3	
IC7	MB-88201H	8	16
IC8	NJM2903D	4	8
IC101	M54529AP	7	1, 14
IC102	M54529AP	7	1, 14

KY-144A
1-624-994-21(1)
BVU-900

HN-80A, PH-5(A), PH-5(B), PTC-30, PTC-33, PTC-34

HN-80A; THREADING MOTOR DRIVER
PH-5(A); TAPE TOP LED
PH-5(B); TAPE TOP SENSOR
PTC-30; SP,KCA DETECTOR
PTC-33; FR STOP DETECTOR
PTC-34; UNTHREAD END DETECTOR

CN227

1	REG +14V IN
2	REG +14V IN
3	GND
4	GND
5	GND
6	GND
7	REG +12V IN
8	REG +12V IN
9	REG -5V IN
10	REG -5V IN
11	REG +5V IN
12	REG +5V IN
13	GND
14	GND
15	CHARACTER SIG IN
16	CHARACTER BACK IN
17	GND
18	GND
19	THREADING MOTOR (+) IN
20	THREADING MOTOR (-) IN

TC-51,230-27A
TC-51,230-28A
SY-102B, 550-10
SY-102B, 550-9

+14V
PS1 F75
D1 10E-2 D5 10E-2 D6 10E-2
IC1 M54543L
VCC1 VCC2 VCC2' VCC1'
IN 1 IN 2 CONTROL LOGIC MOTOR DRIVER OUT 1 MOTOR DRIVER OUT 2 GND
C2 0.01 :CC C1 0.01 :CC C3 0.01 :CC
D2 1SS119 D3 1SS119

CN511

LOADING MOTOR (-) OUT	1
LOADING MOTOR (+) OUT	2
LOADING MOTOR (G)	3

M1004 LOADING MOTOR

CN228

1	——
2	——
3	——
4	THREAD END 2 OUT
5	THREAD END 1 OUT
6	UNTHREAD END OUT
7	——
8	——
9	——
10	——
11	——
12	——
13	——
14	TAPE TOP (E) OUT
15	TAPE TOP (C) OUT
16	L:SP TAPE OUT
17	L:KCA OUT
18	LED +5V IN
19	——
20	N C

SY-102B, 555-3
SY-102B, 555-2
SY-102B, 555-1
SY-102B, 555-7
SY-102B, 555-6
SY-102B, 555-4
SV-88C, 1-31A

CN512

UNTHREAD END IN	1
GND	2
LED +5V OUT	3

R2 330

CN506

GND	1
THREAD 1 IN	2
THREAD 2 IN	3
LED +5V OUT	4

R3 330

CN509

GND	1
LED +5V OUT	2
TAPE TOP (C) IN	3
TAPE TOP (E) IN	4

R4 330

CN507

——	1
+5V OUT	2
L:KCA IN	3
GND	4
L:SP TAPE IN	5

IC1 GP1L53 PTC-34

IC1 GP1L53 IC2 GP1L53 PTC-33

BR5104S PH-5 (A)

SPS102-A PH-5 (B)

R2 220 R3 220
IC2 GP1L52 IC3 GP1L52 PTC-30

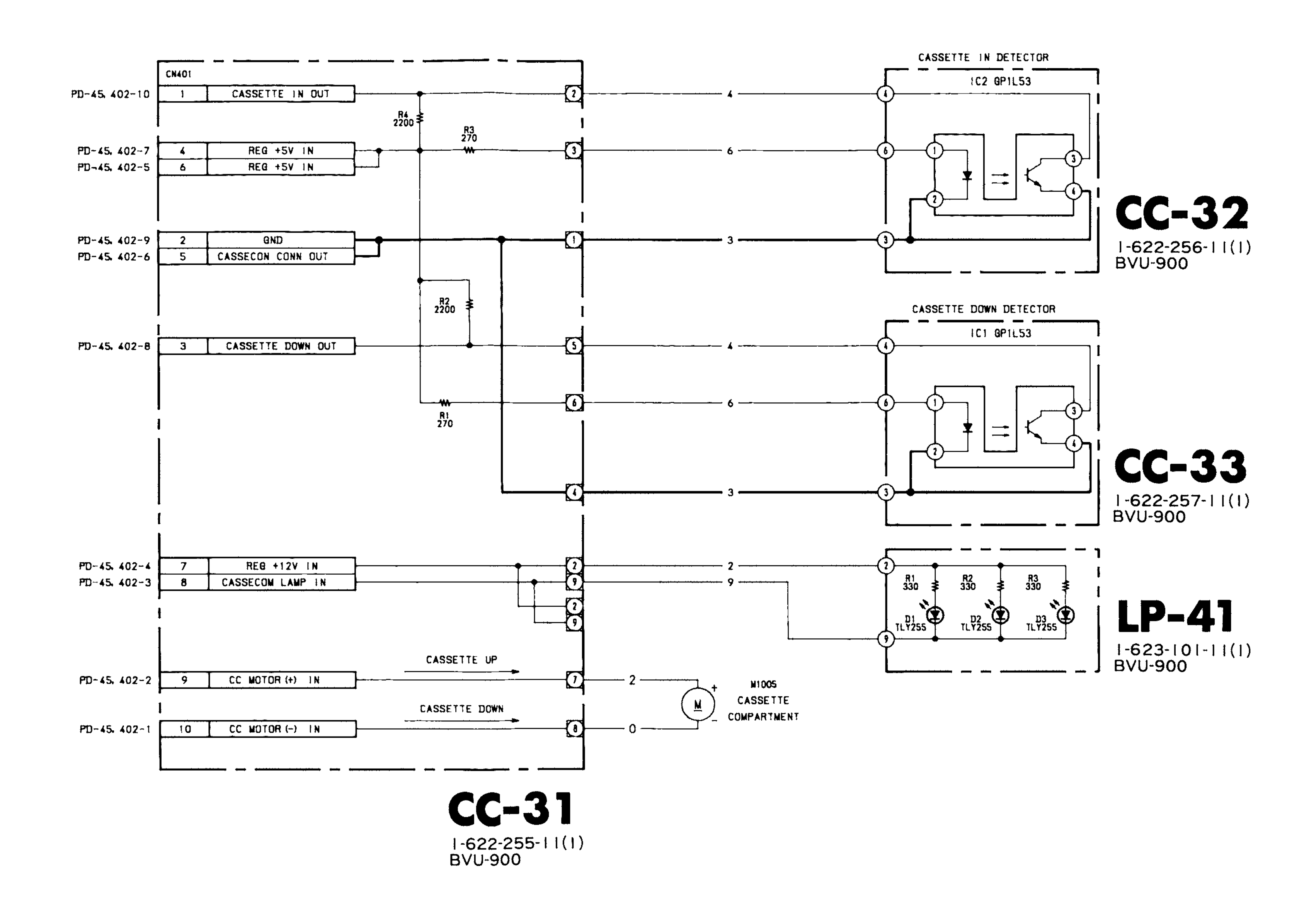
NOTE:

The shaded and ⚠ -marked components are critical to safety.
Replace only with same components as specified.

HN-80A
1-622-725-11(1)
BVU-900

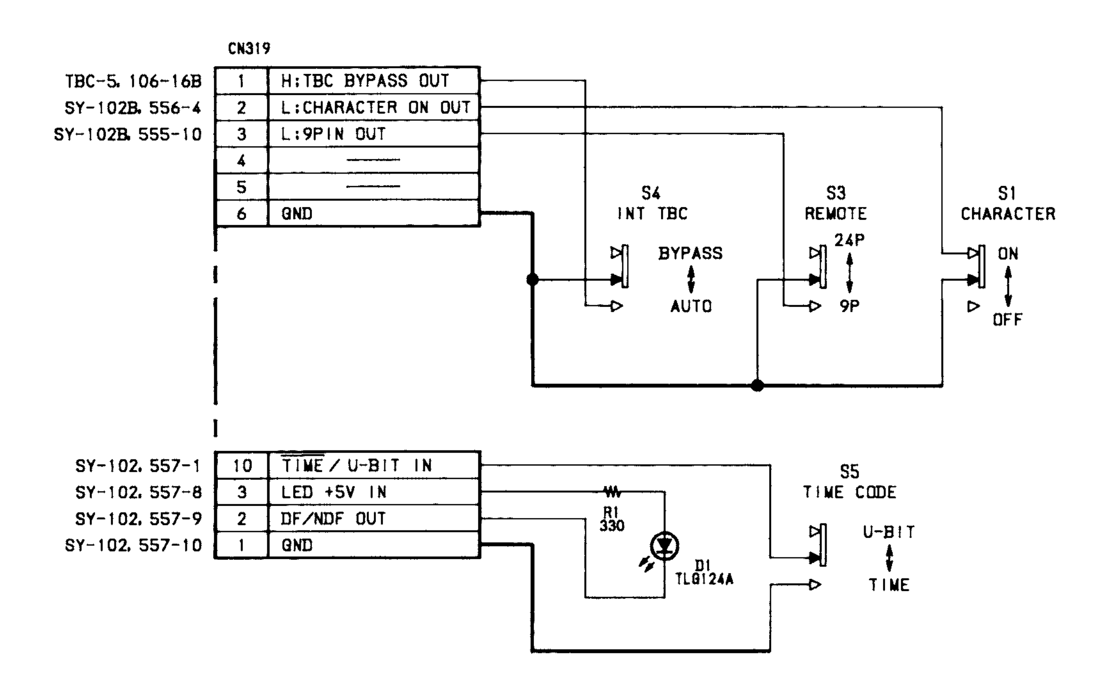
A B C D E F G H

CC-31; CASSETTE COMPARTMENT DRIVER
CC-32; CASSETTE IN DETECTOR
CC-33; CASSETTE DOWN DETECTOR
LP-41; CASSETTE COMPARTMENT LIGHT



A B C D E F G H

SW-290; TIME CODE CONTROL/SELECT SWITCH



SW-290

1-622-680-11(1)
BVU-900

PTC-32; SEARCH DIAL

IC5
μPC339C

IC2
GP1L52

IC4
GP1L52

IC3
GP1L53

IC1
GP1L52

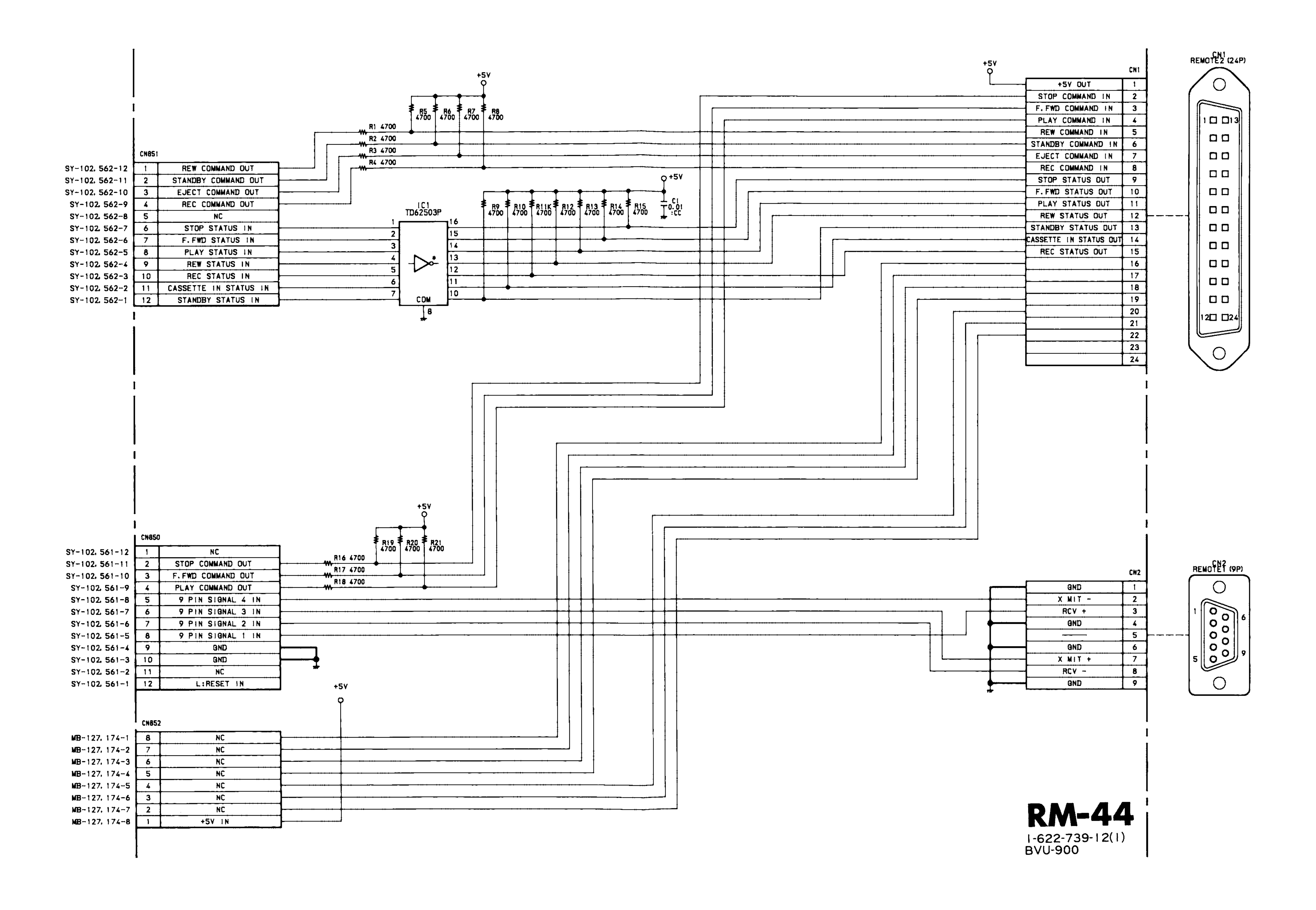
R1 150
R2 150
R3 5100
R4 560
R5 3300
R6 100
R2 100
R7 3300
R8 100
R10 100
C1 47 10V

REG +5V	2	KY-144A 4-1
GND	1	KY-144A 4-6
DIAL A OUT	3	KY-144A 4-2
DIAL B OUT	4	KY-144A 4-3
DIAL STILL OUT	6	KY-144A 4-4
H:JOB/L:SHUTTLE OUT	7	KY-144A 4-5

PTC-32
1-622-638-11(1)
BVU-900

A B C D

RM-44; REMOTE CONTROL(9PIN&24PIN)



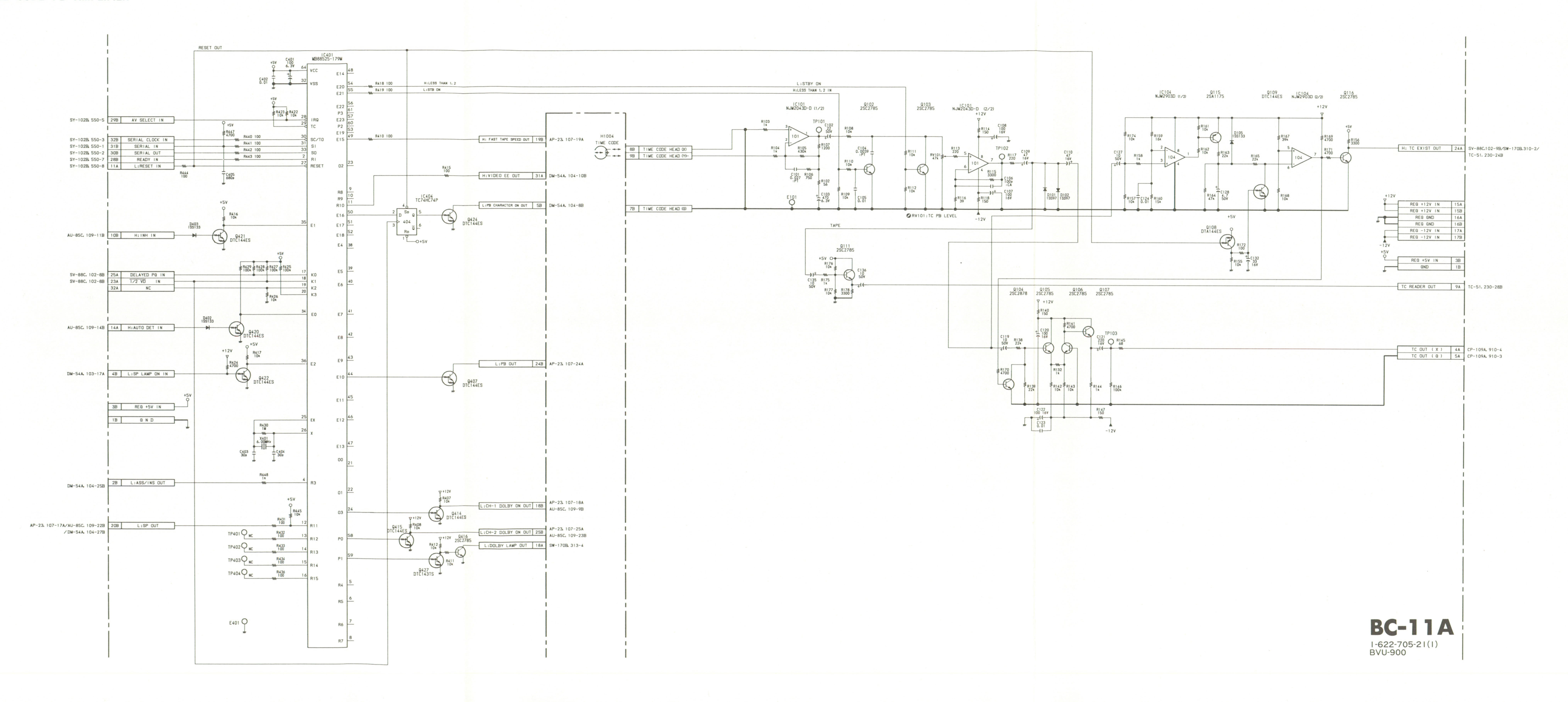
TC-51; TIME CODE/CHARACTER GENERATOR

TC-51

1-626-683-11(1)

BVU-900

BC-11A; VIDEO/AUDIO TIMING CONTROL
TIME CODE PB AMPLIFIER



AC-78; AC PRIMARY CIRCUIT

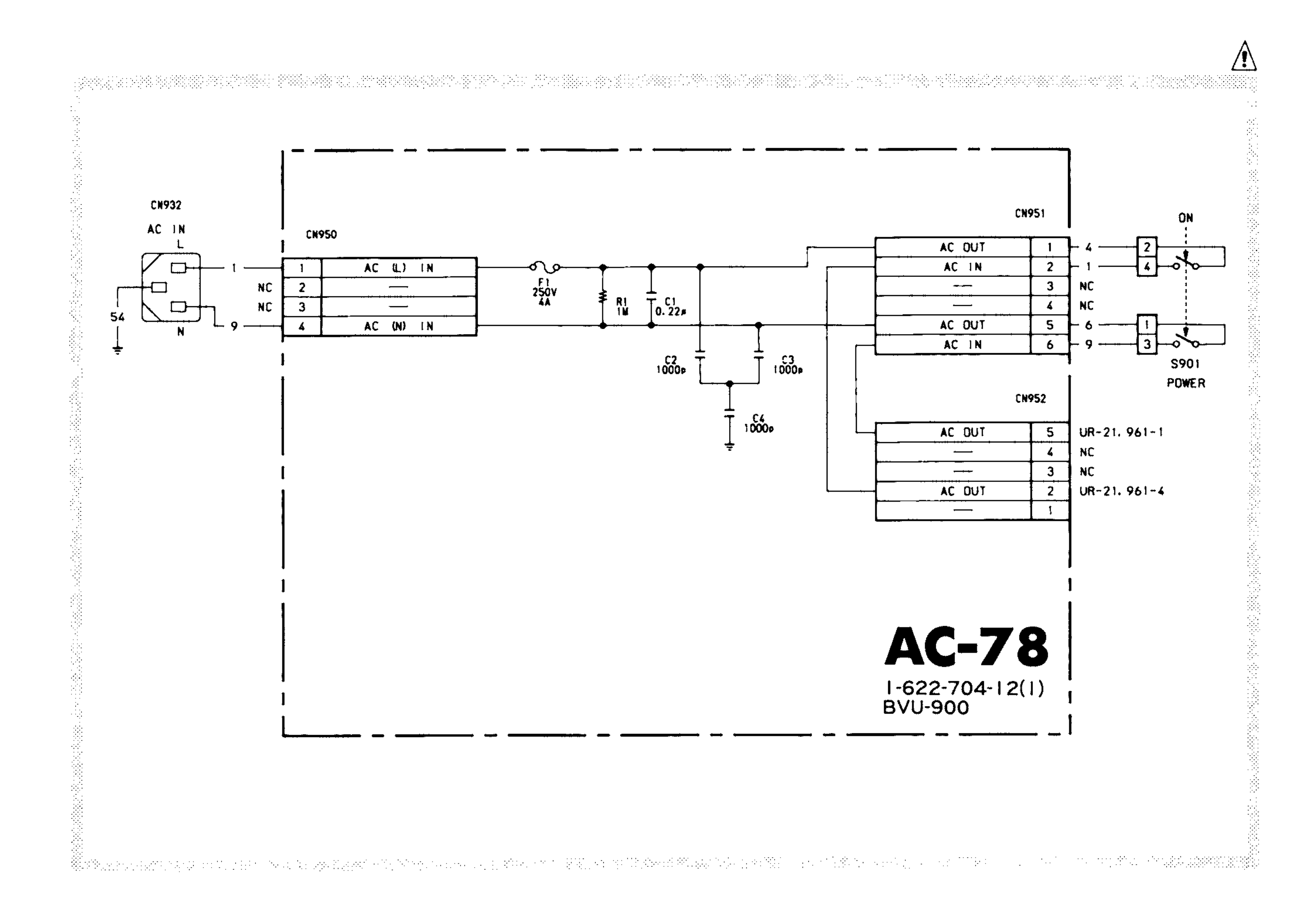
1

2

3

4

5



NOTE:

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

A | B | C | D

UR-21; SWITCHING REGULATOR
M1
M2

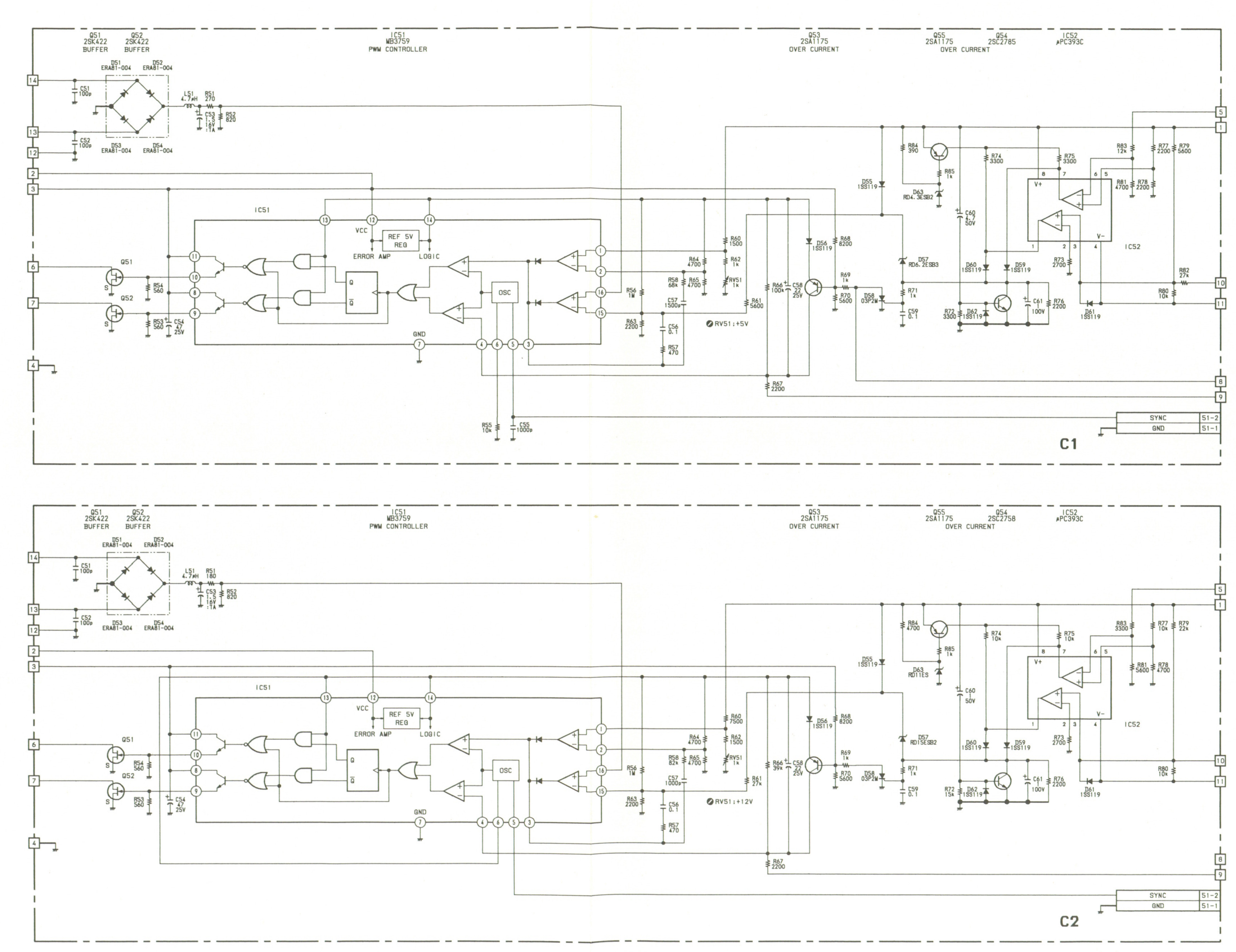
NOTE:
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

M1

M2

UR-21(1/2)
1-413-307-13(1)
BVU-900

UR-21; SWITCHING REGULATOR
C1
C2



UR-21(2/2)

1-413-307-13(1)
BVU-900

A B C D E F G H

MB-127A(1/2); MOTHER BOARD

RM-45 912-5	162-1	RM10	106-12A	
RM-45 912-4	162-2	RM11	106-13A	
RM-45 912-3	162-3	RM12	106-14A	
RM-45 912-2	162-4	——		
RM-45 912-1	162-5	RM14	106-15A	
RM-45. 911-10	161-1	SYNC CONTROL IN	106-6A	
RM-45. 911-9	161-2	HUE CONTROL IN	106-7A	
RM-45. 911-8	161-3	SC CONTROL IN	106-8A	
RM-45. 911-7	161-4	VIDEO LEVEL CONTROL IN	106-9A	
RM-45. 911-6	161-5	SET UP CONTROL IN	106-10A	
RM-45. 911-5	161-6	CHROMA LEVEL CONTROL IN	106-11A	
RM-45. 911-4	161-7	REG -12V OUT	R2 100	-12V
RM-45. 911-3	161-8	GND		
RM-45. 911-2	161-9	GND		
RM-45. 911-1	161-10	REG +12V OUT	R1 100	+12V
SWREG. 963-9	110-1	+14V IN		+14V
SWREG. 963-8	110-2	-17V IN		-17V
SWREG. 963-7	110-3	-5V IN		-5V
SWREG. 963-6	110-4	GND		
SWREG. 963-4	110-5	GND		
SWREG. 963-3	110-6	+5V IN		+5V
SWREG. 963-1	110-7	+5V (D) IN		+5V (D)
SWREG. 962-1	111-1	+9V IN		+9V
SWREG. 962-3	111-2	GND		
SWREG. 962-4	111-3	GND		
SWREG. 962-5	111-4	+12V IN		+12V
SWREG. 962-6	111-5	+12V IN		+12V
SWREG. 962-7	111-6	-12V IN		-12V
VR-76. 301-5	120-1	+12V OUT		+12V
VR-76. 301-4	120-2	+12V OUT		+12V
VR-76. 301-3	120-3	-12V OUT		-12V
VR-76. 301-2	120-4	GND		
VR-76. 301-1	120-5	GND		
SW-170B. 311-6	121-1	+12V OUT		+12V
SW-170B. 311-5	121-2	+5V OUT		+5V
SW-170B. 311-4	121-3	GND		
SW-170B. 311-3	121-4	L:REMOTE IN	226-5	
SW-170B. 311-2	121-5	——		
SW-170B. 311-1	121-6	AUTO OFF OUT	226-3	

⚠ PM1002 T-BRAKE SOLENOID

	CN123		
4	3	T-BRAKE SOL HOLDER OUT	122-1
8	2	T-BRSKE SOL STARTER OUT	122-2
1	1	T-BRAKE SOL +12V OUT	122-3

	CN122		
PD-45. 409-3	1	T-BRAKE SOL HOLDERIN	123-3
PD-45. 409-2	2	T-BRAKE SOL STARTER IN	123-2
PD-45. 409-1	3	T-BRAKE SOL +12V IN	123-1

PD-45. 701-6	128-1	——	
PD-45. 701-5	128-2	——	
PD-45. 701-4	128-3	+12V OUT	+12V
PD-45. 701-3	128-4	GND	
PD-45. 701-2	128-5	GND	
PD-45. 701-1	128-6	+12V OUT	+12V
AU-87A. 870-6	129-1	-12V OUT	-12V
AU-87A. 870-5	129-2	-12V OUT	-12V
AU-87A. 870-4	129-3	GND	
AU-87A. 870-3	129-4	GND	
AU-87A. 870-2	129-5	+12V OUT	+12V
AU-87A. 870-1	129-6	+12V OUT	+12V

TBC-5 (NTSC) / TBC-6 (PAL)

CN106

		A	Pin	B		
		GND	1	GND		
		GND	2	GND		
	110-7	+5V (D) IN	3	+5V (D) IN	110-7	
	110-7	+5V (D) IN	4	+5V (D) IN	110-7	
		——	5	——		
	161-1	SYNC CONTROL IN	6	REF VIDEO IN (G)	168-1	
	161-2	HUE CONTROL IN	7	REF VIDEO IN (X)	168-2	
	161-3	SC CONTROL IN	8	——		
	161-4	VIDEO LEVEL CONTROL IN	9	TBC REF VIDEO OUT (G)	166-1	
	161-5	SET UP CONTROL IN	10	TBC REF VIDEO OUT (X)	166-2	102-8A
	161-6	CHROMA LEVEL CONTROL IN	11	VIDEO OUT-3 (G)	166-3	
	162-1	RM10	12	VIDEO OUT-3 (X)	166-4	
	162-2	RM11	13	TBC VIDEO OUT (G)	104-13A	
	162-3	RM12	14	TBC VIDEO OUT (X)	104-14A	
	162-5	RM14	15	L:INT TBC OUT	104-15A	101-23A
	101-30A	L;DNR OUT	16	H;TBC BYPASS IN	136-6	
		NOR CONFI	17	——		
		DT V IN	18	TBC OFF TAPE (DT) IN	104-18A	
		——	19	TBC DO PULSE IN	104-19A	
		——	20	REC/EE 12V IN	104-20A	
		——	21	L:COLOR IN	104-21A	
104-12B	102-22A	H; VIDEO TAPE FWD IN	22	INT SC RETURN OUT (G)	104-22A	
		——	23	INT SC RETURN OUT (X)	104-23A	
		——	24	TBC C IN (G)	104-24A	
		——	25	TBC C IN (X)	104-25A	
104-26B	102-26A	H: X10 IN	26	V-AXIS INV OUT *	104-26A	
		——	27	NON INV C IN (X) *	104-27A	
		——	28	NON INV C IN (G) *	104-28A	
		——	29	——		
	-12V	-12V IN	30	-12V IN	-12V	
	-5V	-5V IN	31	-5V IN	-5V	
		GND	32	GND		

		A	Pin	B		
		GND	1	GND		
	+5V	+5V IN	2	+5V IN	+5V	
	+12V	+12V IN	3	+12V IN	+12V	
		——	4	——		
		——	5	H:TBC SYNC DELAY IN	101-12A	
		——	6	——	103-6A	
		——	7	TBC C RF IN (G)	103-7A	
		——	8	TBC C RF IN (X)	103-8A	
		——	9	INV C OUT (G) *	103-9A	
		——	10	INV C OUT (X) *	103-10A	
		——	11	——		
		——	12	——		
		——	13	924 C IN (G) *	103-13A	
		——	14	924 C IN (X) *	103-14A	
		——	15	——		
104-12B	102-12A	L:LESS THAN 1.2 IN	16	——		
104-14B	102-14A	V-BLK IN	17	L:SERVO LOCK IN	101-17A	103-17B
		——	18	GUARD BAND PULSE IN *	103-18A	
		——	19	L:TBC B/W IN	101-13A	
		——	20	SW PULSE IN	101-19A	103-20B
		——	21	TBC Y IN (G)	103-21A	
		——	22	TBC Y IN (X)	103-22A	
		——	23	SYNC Y IN (G) *	103-23A	
		——	24	SYNC Y IN (X) *	103-24A	
		——	25	——		
		——	26	——		
		——	27	——		
		——	28	——		
		——	29	H:FF/X10 FWD IN	101-29A	
		——	30	——		
		——	31	——		
		GND	32	GND		

A CN105 B

DM-54A

CN104

		A	Pin	B		
		GND	1	GND		
		——	2	PB SYNC 2 OUT (X)	233-14	
	165-2	VIDEO OUT 2 (X)	3	VIDEO OUT 1 (G)	165-3	
	165-1	VIDEO OUT 2 (G)	4	VIDEO OUT 1 (X)	165-4	
	172-2	VIDEO OUT 4 (X)	5	——		
	172-1	VIDEO OUT 4 (G)	6	——		
		——	7	——		
	164-3	DUB C OUT (G)	8	L:PB CHARACTER ON IN	108-5B	
	164-2	DUB C OUT (X)	9	——		
102-7A	164-1	SLAVE DUB IN/PB 1ST OUT *	10	——		
	169-2	EXT SC IN (G)	11	——		
	169-1	EXT SC IN (X)	12	L:LESS THAN 1.2 OUT	102-12A	105-16A
	106-13B	TBC VIDEO IN (G)	13	PS VD IN	102-13A	
	106-14B	TBC VIDEO IN (X)	14	V-BLK IN	102-14A	105-17A
101-23A	106-15B	L:INT TBC IN	15	CHARACTER BACK IN	233-9	227-16
		——	16	CHARACTER SIG IN	233-10	227-15
		——	17	PB SYNC 1 OUT	102-17A	
	106-18B	TBC OFF TAPE (DT) OUT	18	H;TBC LAMP ON OUT	135-3	
	106-19B	TBC DO PLUSE OUT	19	PB 135° BURST OUT *	102-19A	
	106-20B	REC/EE 12V OUT	20	——		
	106-21B	L:COLOR OUT	21	——		
	106-22B	INT SC RETURN IN (G)	22	H; VIDEO TAPE FWD IN	102-22A	106-22A
	106-23B	INT SC RETURN IN (X)	23	——		
	106-24B	TBC C OUT (G)	24	——		
	106-25B	TBC C OUT (X)	25	——		
	106-26B	V-AXIS INV. IN *	26	H: X10 IN	102-26A	106-26A
	106-27B	NON INV. C OUT (X) *	27	L:SP IN	108-20B	
	106-28B	NON INV. C OUT (G) *	28	H; TBC SW ON IN	102-28A	
	-17V	-17V IN	29	-17V IN	-17V	
	-12V	-12V IN	30	-12V IN	-12V	
	-5V	-5V IN	31	-5V IN	-5V	
		GND	32	GND		

		A	Pin	B		
		GND	1	GND		
	+5V	+5V IN	2	+5V IN	+5V	
	+12V	+12V IN	3	+12V IN	+12V	
	+14V	+14V IN	4	+14V IN	+14V	
		——	5	——		
	105-6B	——	6	——		
	105-7B	TBC C RF OUT (G)	7	EE CHROMA RF IN (G)		
	105-8B	TBC C RF OUT (X)	8	EE CHROMA RF IN (X)		
	105-9B	INV C IN (G) *	9	——		
	105-10B	INV C IN (X) *	10	——		
	163-2	DUB Y OUT (G)	11	PB Y RF OUT (G)	150-5	
	163-1	DUB Y OUT (X)	12	PB Y RF OUT (X)	150-6	
	105-13B	924 C OUT (G) *	13	——		
	105-14B	924 C OUT (X) *	14	EE Y RF IN (G)		
		——	15	EE Y RF IN (X)		
		——	16	——		
108-4B	135-1	L;SP LAMP ON OUT	17	L:SERVO LOCK IN	101-17A	105-17B
	105-18B	GUARD BAND PULSE OUT *	18	H;> FWD X12 IN	101-14A	
		——	19	H;> REV X12 IN	101-15A	
		——	20	SW PULSE IN	101-19A	105-20B
	105-21B	TBC Y OUT (G)	21	L;MORE THAN 1.2 IN	101-21A	
	105-22B	TBC Y OUT (X)	22	——		
	105-23B	SYNC Y OUT (G) *	23	——		
	105-24B	SYNC Y OUT (X) *	24	——		
		——	25	——		
		——	26	——		
		——	27	CH-A PB RF IN (G)	152-6	
		——	28	CH-A PB RF IN (X)	152-5	
		——	29	CH-B PB RF IN (G)	152-2	
		——	30	CH-B PB RF IN (X)	152-1	
		——	31	——		
		GND	32	GND		

A CN103 B

SV-88C

CN102

		A	Pin	B			
		GND	1	GND			
	168-4	L:FRAMING ENABLE IN	2	SERIAL IN	220-10	108-31B	
		——	3	SERIAL OUT	220-9	108-30B	
	168-2	REF VIDEO IN (X)	4	SERIAL CLOCK OUT	220-8	108-32B	
	168-1	REF VIDEO IN (G)	5	SV SELECT IN	220-7		
	172-4	+12V IN	6	CTL COUNT DIR OUT	221-3		
104-10A	164-1	SLAVE DUB IN/PB 1ST OUT *	7	REC/PB CTL OUT	109-31B		
166-2	106-10B	TBC REF VIDEO IN	8	——			
	169-3	H;EXT TBC ENABLE IN	9	——			
108-11A 232-11	220-3	L:RESET IN	10	——			
	221-4	4VD OUT	11	S-RELL ERROR OUT	171-6		
105-16A	104-12B	L:LESS THAN 1.2 OUT	12	S-REEL CURRENT IN (X)	171-5		
	104-13B	PS VD OUT	13	S-REEL CURRENT IN (G)	171-4		
105-17A	104-14B	V-BLK OUT	14	T-REEL ERROR OUT	171-3		
		——	15	T-REEL CURRENT IN (X)	171-2		
		——	16	T-REEL CURRENT IN (G)	171-1		
	104-17B	PB SYNC 1 IN	17	CAPSTAN ERROR OUT	175-5		
		——	18	CAPSTAN CURRENT IN	175-4		
	104-19B	PB 135° BURST IN *	19	DRUM ERROR OUT	175-3		
	175-1	M-DRIVER GND	20	DRUM CURRENT IN	175-2		
		——	21	TAPE PROTECT OUT	221-5		
106-22A	104-22B	H:VIDEO TAPE FWD OUT	22	TAPE DIRECTION OUT	221-6	232-7	
	221-8	L; END BRAKE IN	23	CAPSTAN 4FG OUT	221-7	233-19	
108-28B	220-4	READY IN	24	EDIT CTL OUT	221-9	232-9	
	108-2B	L;ASM/INS IN	25	1/2 VD OUT	221-10	233-7	108-23A
106-26A	104-26B	H: X10 OUT	26	——			
		——	27	——			
	104-28B	H;TBC SW ON OUT	28	——			
	-17V	-17V IN	29	-17V IN	-17V		
	-12V	-12V IN	30	-12V IN	-12V		
	-5V	-5V IN	31	-5V IN	-5V		
		GND	32	GND			

		A	Pin	B	
		GND	1	GND	
	+5V	+5V IN	2	+5V IN	+5V
	+12V	+12V IN	3	+12V IN	+12V
	+14V	+14V IN	4	+14V IN	+14V
		——	5	——	
		——	6	——	
		——	7	CTL HEAD (X)	155-2
	155-1	CTL HEAD (G)	8	CTL HEAD (Y)	155-3
		——	9	CAPSTAN FG GND	137-2
	137-1	L;CAPSTAN FWD OUT	10	CAPSTAN FG (B) IN	137-3
		——	11	CAPSTAN FG (A) IN	137-4
	105-5B	H;TBC SYNC DELAY OUT	12	CAPSTAN FG VCC	137-5
	105-19B	L;TBC B/W OUT	13	REEL FG GND	139-6
	103-18B	H;> FWD X12 OUT	14	S-REEL FG (B) IN	139-5
	103-19B	H;> REV X12 OUT	15	S-REEL FG (A) IN	139-4
		——	16	T-REEL FG (A) IN	139-3
105-17B	103-17B	L:SERVO LOCK OUT	17	T-REEL FG (B) IN	139-2
		——	18	REEL FG BIAS OUT	139-1
105-20B	103-20B	SW PULSE OUT	19	PHASE PG GND	138-1
		——	20	PHASE PG IN	138-2
	103-21B	L:MORE THAN 1.2 OUT	21	SPEED PG (A) IN	138-3
	221-2	SERVO SPARE IN	22	SPEED PG GND	138-4
104-15A	106-15B	L:INT TBC IN	23	SPEED PG (B) IN	138-5
	140-1	TRACON SKEW VCC	24	S-CDS GND	231-13
	140-2	TRACKING LEVEL IN	25	S-CDS LED DRIVE OUT	231-14
	135-6	SKEW LEVEL IN	26	S-CDS IN	231-15
135-5	140-3	TRACON SKEW GND	27	S-CDS BIAS OUT	231-16
		——	28	T-CDS GND	231-17
	105-29B	H;FF/X10 FWD OUT	29	T-CDS LED DRIVE OUT	231-18
	106-16A	L;DNR IN	30	T-CDS IN	231-19
	228-17	L;KCA IN	31	T-CDS BIAS OUT	231-20
		GND	32	GND	

A CN101 B

	106-9B	TBC REF VIDEO OUT (G)	166-1	CP-109A. 908-4
	106-10B	TBC REF VIDEO OUT (X)	166-2	CP-109A. 908-3
	106-11B	VIDEO OUT-3 (G)	166-3	CP-109A. 908-2
	106-12B	VIDEO OUT-3 (X)	166-4	CP-109A. 908-1
102-7A	104-10A	SLAVE DUB IN/PB 1ST OUT	164-1	CP-109A. 906-3
	104-9A	DUB C OUT (X)	164-2	CP-109A. 906-2
	104-8A	DUB C OUT (G)	164-3	CP-109A. 906-1
	104-12A	EXT SC IN (X)	169-1	CP-109A. 903-3
	104-11A	EXT SC IN (G)	169-2	CP-109A. 903-2
	102-9A	H;EXT TBC ENABLE IN	169-3	CP-109A. 903-1
	104-6A	VIDEO OUT-4 (G)	172-1	CP-109A. 904-4
	104-5A	VIDEO OUT-4 (X)	172-2	CP-109A. 904-3
		GND	172-3	CP-109A. 904-2
	102-6A	+12V IN	172-4	CP-109A. 904-1
	104-4A	VIDEO OUT-2 (G)	165-1	CP-109A. 907-4
	104-3A	VIDEO OUT-2 (X)	165-2	CP-109A. 907-3
	104-3B	VIDEO OUT-1 (G)	165-3	CP-109A. 907-2
	104-4B	VIDEO OUT-1 (X)	165-4	CP-109A. 907-1
106-6B	102-5A	REF VIDEO IN (G)	168-1	CP-109A. 902-4
106-7B	102-4A	REF VIDEO IN (X)	168-2	CP-109A. 902-3
	102-3A		168-3	CP-109A. 902-2
	102-2A	L;FRAMING ENABLE IN	168-4	CP-109A. 902-1
	102-20A	M-DRIVER GND	175-1	DR-53. 808-5
	102-20B	DRUM CURRENT IN	175-2	DR-53. 808-4
	102-19B	DRUM ERROR OUT	175-3	DR-53. 808-3
	102-18B	CAPSTAN CURRENT IN	175-4	DR-53. 808-2
	102-17B	CAPSTAN ERROR OUT	175-5	DR-53. 808-1
	102-16B	T-REEL CURRENT IN (G)	171-1	DR-59. 801-6
	102-15B	T-REEL CURRENT IN (X)	171-2	DR-59. 801-5
	102-14B	T-REEL ERROR OUT	171-3	DR-59. 801-4
	102-13B	S-REEL CURRENT IN (G)	171-4	DR-59. 801-3
	102-12B	S-REEL CURRENT IN (X)	171-5	DR-59. 801-2
	102-11B	S-REEL ERROR OUT	171-6	DR-59. 801-1
	101-8A	CTL HEAD (G)	155-1	DUS147. 451-3
	101-7B	CTL HEAD (X)	155-2	DUS147. 451-2
	101-8B	CTL HEAD (Y)	155-3	DUS147. 451-1
	101-10A	L;CAPSTAN FWD OUT	137-1	CAPSTAN. 431-6
	101-9B	CAPSTAN FG GND	137-2	CAPSTAN. 431-4
	101-10B	CAPSTAN FG (B) IN	137-3	CAPSTAN. 431-3
	101-11B	CAPSTAN FG (A) IN	137-4	CAPSTAN. 431-2
	101-12B	CAPSTAN FG VCC	137-5	CAPSTAN. 431-1
	101-19B	PHASE PG GND	138-1	DRUM 421-6
	101-20B	PHASE PG IN	138-2	DRUM 421-5
	101-21B	SPEED PG (A) IN	138-3	DRUM 421-4
	101-22B	SPEED PG GND	138-4	DRUM 421-3
	101-23B	SPEED PG (B) IN	138-5	DRUM 421-2
	221-1	DEW SENSOR IN	138-6	DRUM 421-1

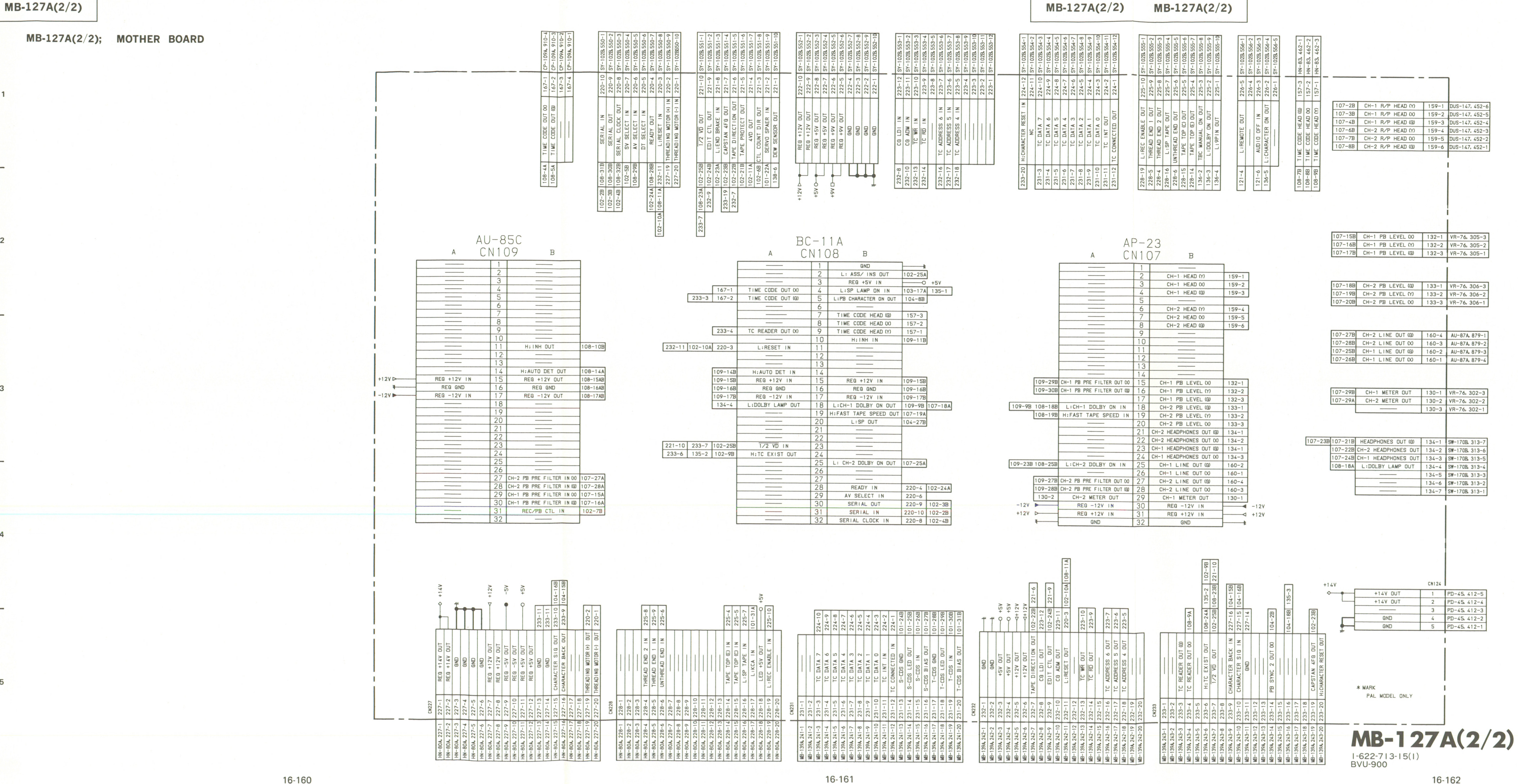
RM-44. 852-8	174-1	——		
RM-44. 852-7	174-2	——		
RM-44. 852-6	174-3	——		
RM-44. 852-5	174-4	——		
RM-44. 852-4	174-5	——		
RM-44. 852-3	174-6	——		
RM-44. 852-2	174-7	——		
RM-44. 852-1	174-8	+5V OUT	+5V	
DR-53. 805-1	126-10	+14V OUT	+14V	
DR-53. 805-2	126-9	+14V OUT		
DR-53. 805-3	126-8	+14V OUT		
DR-53. 805-4	126-7	GND		
DR-53. 805-5	126-6	GND		
DR-53. 805-6	126-5	GND		
DR-53. 805-7	126-4	+12V OUT	+12V	
DR-53. 805-8	126-3	-17V OUT		
DR-53. 805-9	126-2	-17V OUT		
DR-53. 805-10	126-1	-17V OUT	-17V	
SW-170B. 310-6	135-1	L;SP LAMP ON OUT	103-17A	108-4B
SW-170B. 310-5	135-2	H; TC EXIST OUT	108-24A	102-9B 233-6
SW-170B. 310-4	135-3	H; TBC LAMP ON OUT	104-18B	233-16
SW-170B. 310-3	135-4	——		
SW-170B. 310-2	135-5	TRACON SKEW GND OUT	101-27A	140-3
SW-170B. 310-1	135-6	SKEW LEVEL IN	101-26A	
CP-109A. 906-5	163-1	DUB Y OUT (X)	103-12A	
CP-109A. 906-4	163-2	DUB Y OUT (G)	103-11A	
NC	163-3	——		
PD-45. 704-6	152-1	CH-B PB RF IN (X)	103-30B	
PD-45. 704-5	152-2	CH-B PB RF IN (G)	103-29B	
NC	152-3	——		
NC	152-4	——		
PD-45. 704-2	152-5	CH-A PB RF IN (X)	103-28B	
PD-45. 704-1	152-6	CH-A PB RF IN (G)	103-27B	
NC	150-1	——		
NC	150-2	——		
NC	150-3	——		
NC	150-4	——		
VR-76. 307-1	150-5	PB Y RF OUT (G)	103-11B	
VR-76. 307-2	150-6	PB Y RF OUT (X)	103-12B	
NC	150-7	——		
NC	150-8	——		
VR-76. 303-3	140-1	TRACON SKEW VCC	101-24A	
VR-76. 303-2	140-2	TRACKING LEVEL IN	101-25A	
VR-76. 303-1	140-3	TRACON SKEW GND	101-27A	135-5
SE-48. 425-6	139-1	REEL FG BIAS OUT	101-18B	
SE-48. 425-5	139-2	T-REEL FG (B) IN	101-17B	
SE-48. 425-4	139-3	T-REEL FG (A) IN	101-16B	
SE-48. 425-3	139-4	S-REEL FG (A) IN	101-15B	
SE-48. 425-2	139-5	S-REEL FG (B) IN	101-14B	
SE-48. 425-1	139-6	REEL FG GND	101-13B	
SW-290. 319-6	136-1	GND		
SW-290. 319-5	136-2	TBC MANUAL ON IN	225-3	
SW-290. 319-4	136-3	L:DOLBY ON IN	225-2	
SW-290. 319-3	136-4	L:9PIN IN	225-1	
SW-290. 319-2	136-5	L:CHARACTER ON IN	226-2	
SW-290. 319-1	136-6	H:TBC BYPASS IN	106-16B	

*MARK is PAL MODEL ONLY

NOTE:

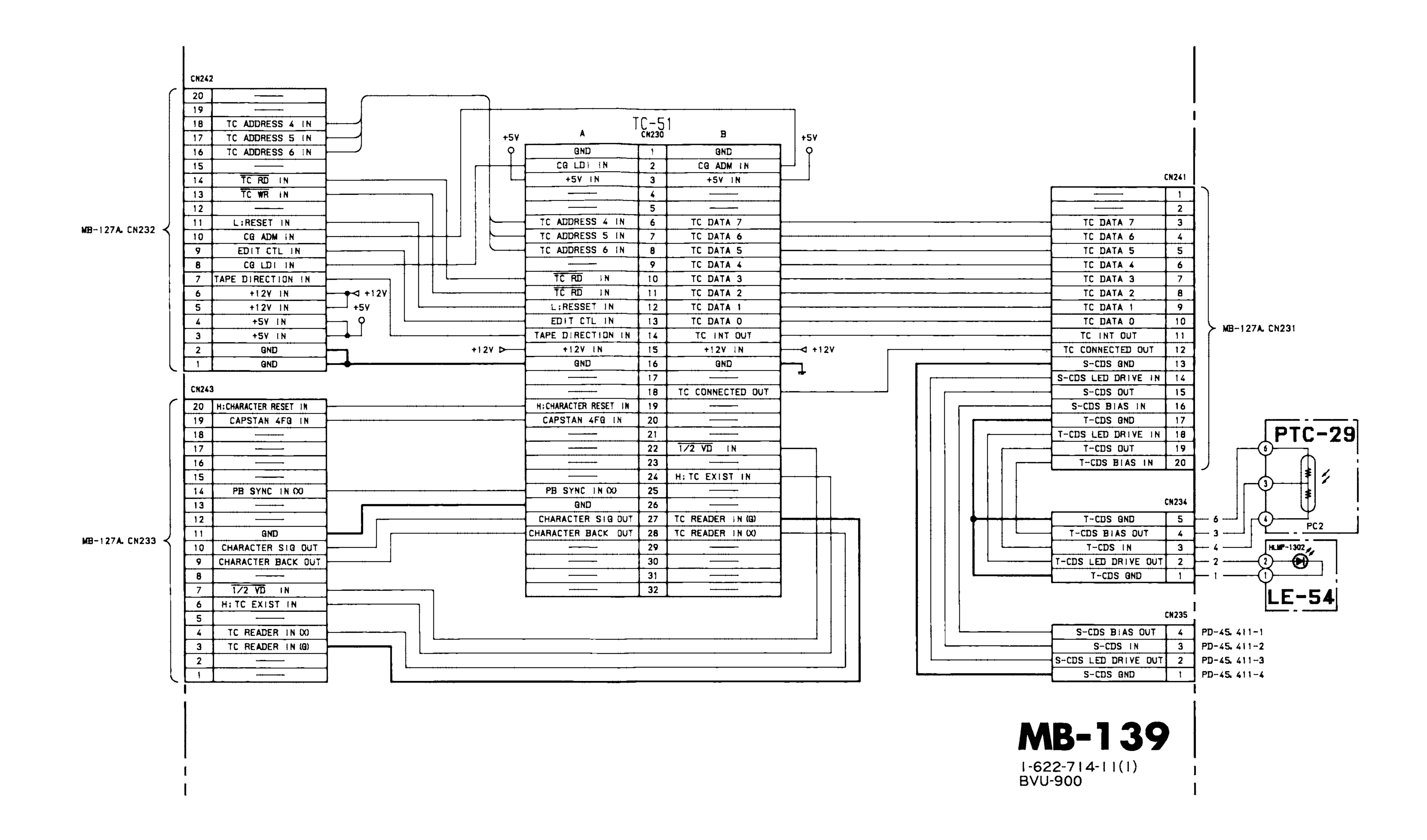
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

MB-127A(1/2)
1-622-713-15(1)
BVU-900



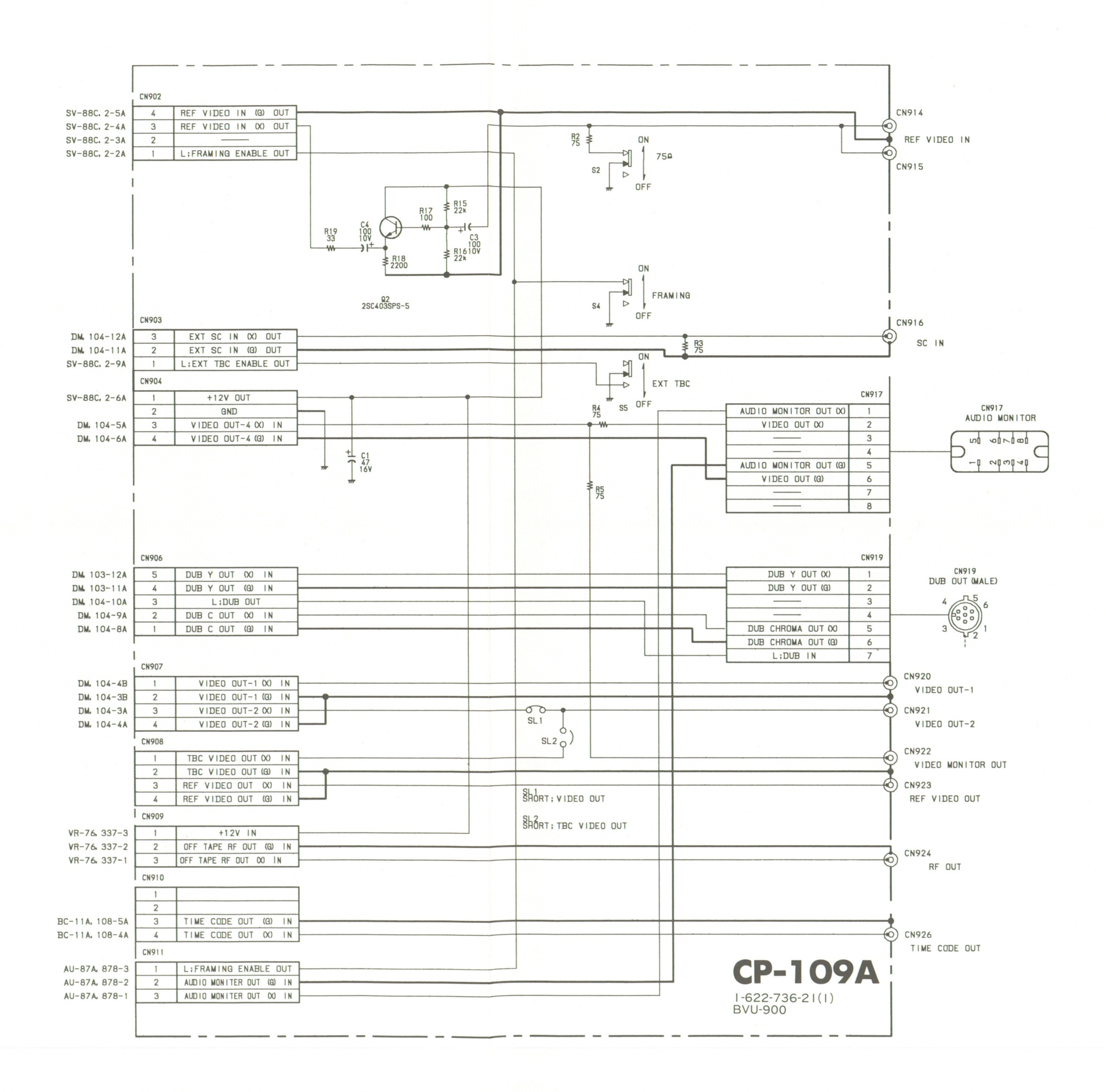
A B C D E F G H I J K L

LE-54; T-TENSION LED
MB-139; SUB MOTHER FOR TC
PTC-29; T-TENSION CdS



A B C D E F G H

CP109A; CONNECTOR PANNEL



A B C D E F G H


FRAME(1/2) FRAME(1/2)
FRAME(1/2) FRAME(1/2)
FRAME(1/2)
MT-28
VR-76
VR-49
HP-28
SW-170B
DP-62
PTC-32
KY-144A
SW-290 (1/2)
TC-51
PTC-29
LE-54
MB-139
JOINT CONNECTOR 20P
TBC-5 (NTSC)/TBC-6 (PAL)
AU-85C/D
DM-54A (NTSC)/DM-55A (PAL)
BC-11A
SV-88C (NTSC)/SV-88D (PAL)
AP-23
MB-127A (1/2)
SY-102B
RM-45
RM-44
SW-290 (2/2)
NOTE:
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.
FRAME(1/2)
BVU-900(I)
16-175
16-176
16-177
16-178
A B C D E F G H I J K L M N O P
1 2 3 4 5


NOTE:
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.
PTC-33
PTC-30
PH-5 (A)
PH-5 (B)
LM-13
PTC-34
HN-80A
CC-31
CC-33
CC-32
PH-5 (C)
PTC-26
LP-41
PTC-28
LE-53
PD-45 (1/2)
SE-48
DUS-177
DUS-178
CAPSTAN MOTOR BLOCK
HN-84
DUS-92
PD-45
DR-53,DR-59
HN-83
DUS-147
MB-127A (2/2)
SW-REG
AC-78
AC-79
AC-78A
CP-109A
AU-87A
FRAME(2/2)
BVU-900(I)

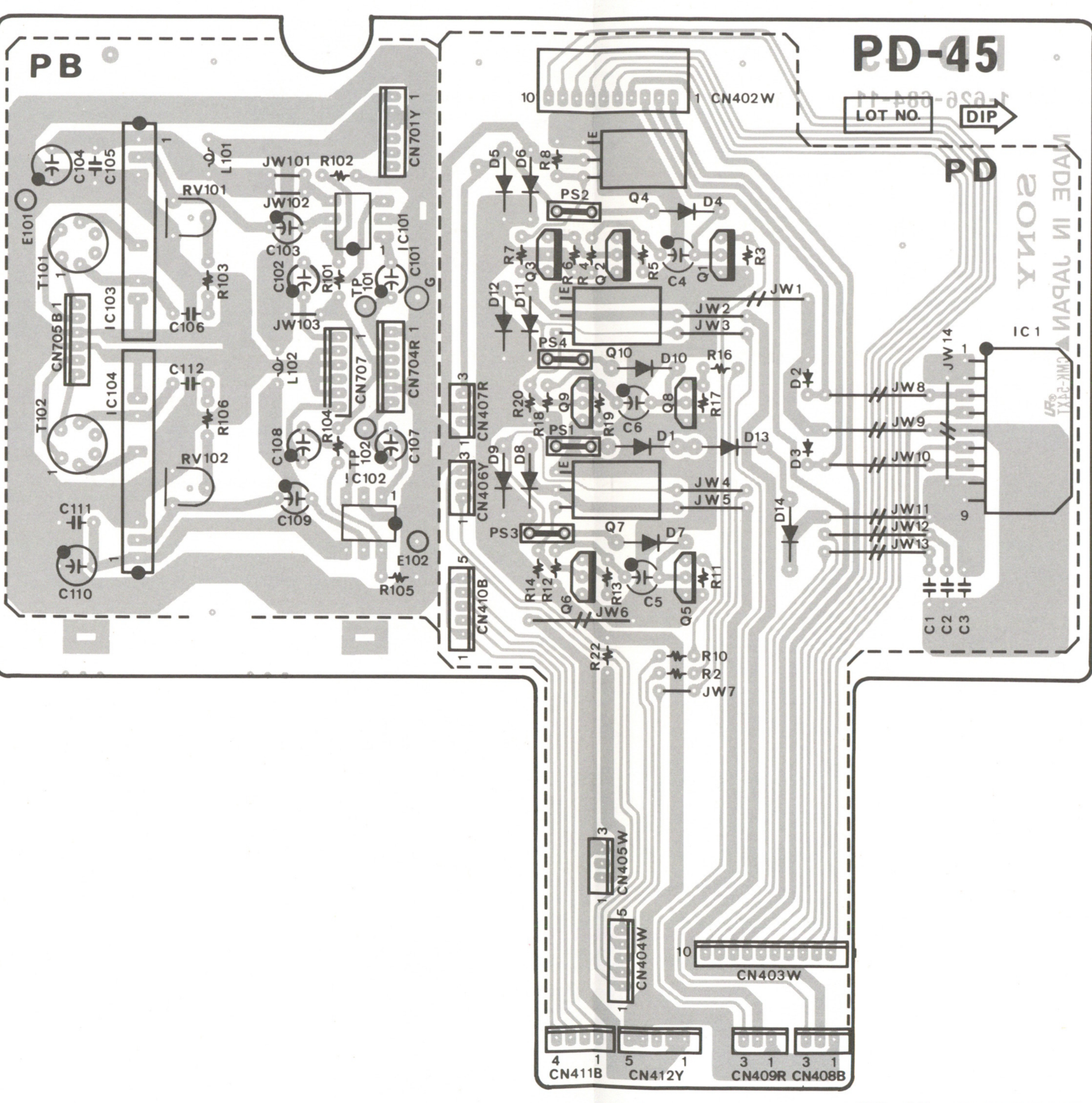
SECTION 17
PRINTED CIRCUIT BOARDS

The circuit information is provided below.

System	Board	Circuit function
VIDEO	PD-45	RF PB amplifier
	DM-54A	Y/C demodulator
AUDIO	AP-23	Audio PB/DOLBY processor
	AU-85C	DOLBY auto detector
	AU-87A	Output/monitor amplifier
	VR-76	PB level control
	MT-28	Level meter
	VR-49	Headphones level control
	HP-28	Headphones
	DUS-92	Audio head
	DUS-147	Junction board for audio head
	SW-170B	Audio monitor select
SERVO	SV-88C	Drum/capstan/reel servo
	SE-48	Reel rotation detector
	DR-53	Motor driver for reel/capstan/drum
	DR-59	Motor driver for reel
	PTC-28	S-tension CdS
	LE-53	S-tension LED
	PTC-29	T-tension CdS
	LE-54	T-tension LED
	DUS-177	T-reel motor
	DUS-178	S-reel motor
	VR-76	Tracking control

System	Board	Circuit function
SYSCON	SY-102B	System control
	KY-144A	Function key board
	DP-62	Display
	BC-11A	Video/audio timing control
	HN-80A	Threading motor driver
	LM-13	Threading motor
	PD-45	Cassette-up compartment motor driver/Solenoid driver
	CC-31	Cassette compartment driver
	CC-32	Cassette in detector
	CC-33	Cassette down detector
	PTC-30	SP, KCA detector
	PTC-33	FR stop detector
	PTC-34	Unthread end detector
	PH-5(A)	Tape top LED
	PH-5(B)	Tape top sensor
	PH-5(C)	Tape end LED
	PTC-26	Tape end sensor
	SW-170B	Select switch /warning indicator
	SW-290	Remote 1/2 Select /TBC ON/OFF /Character ON/OFF
	PTC-32	Search dial
	RM-44	Remote control (9pin & 24pin)
TIME CODE	TC-51	Time code/Character generator
	BC-11A	Time code PB amplifier
	HN-84	Time code head
	SW-290	Time code control Switch
POWER	AC-78	AC primary circuit
	M1	Switching Regulator (UR-21)
	M2	
	C1	
	C2	
OTHERS	MB-127A	Mother board
	MB-139	Sub mother for TC
	CP-109A	Connector pannel
	RM-45	TBC remote control
	AC-78	AC primary circuit
	EX-127	Extention board for audio/time code
	EX-128	Extention board for video/servo/TBC
	HN-80A	Relay board for video/tape sensor/thread motor drive
	HN-83	Relay board for time code head
	LP-41	Cassette compartment light
	TBC-5	Time base corrector (Option)
	DUS-151	Connection (Option)

PD-45; RF PB AMPLIFIER
CASSETTE-UP COMPARTMENT DRIVER
SOLENOID DRIVER



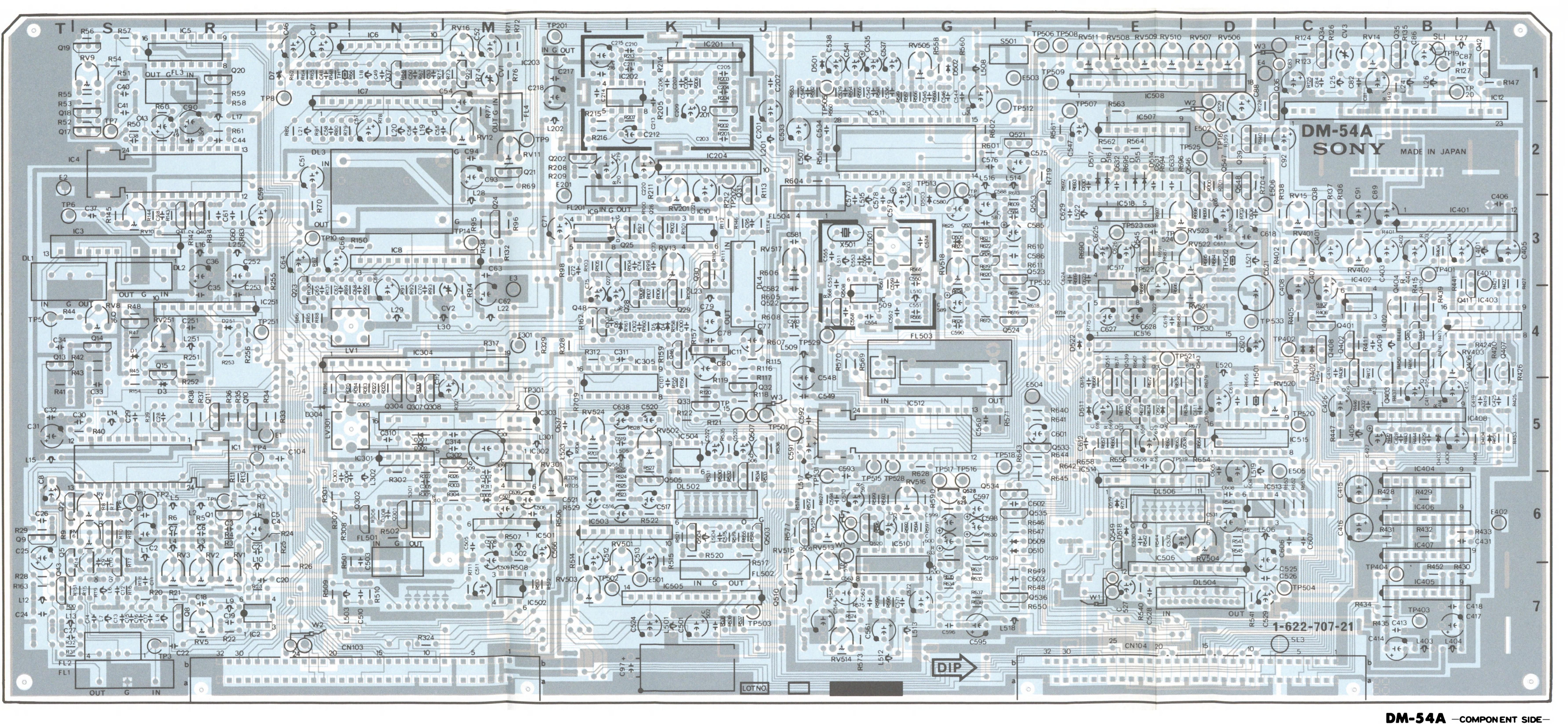
PD-45 —COMPONENT SIDE—
1-626-684-11(1)
BVU-900

DM-54A DM-54A

DM-54A; Y/C DEMODULATOR

DM-54A(1-622-707-21)

CN103	P-7	E506	D-3	IC518	E-3	Q403	B-4	RV13	K-3	TP20	A-1
CN104	D-7					Q404	B-4	RV14	B-1	TP201	L-1
		FL1	S-7	LV1	N-4	Q405	B-4	RV15	C-3	TP202	J-2
CV1	M-1	FL2	S-7	LV301	P-5	Q406	A-4	RV16	M-1	TP251	P-4
CV2	M-4	FL3	R-1			Q407	A-4	RV201	K-2	TP301	M-5
CV3	C-1	FL4	M-2	Q1	R-6	Q408	C-4	RV251	S-4	TP401	B-3
		FL201	L-3	Q2	T-6	Q409	C-4	RV301	L-6	TP402	C-4
D1	S-4	FL501	N-6	Q3	S-6	Q410	B-4	RV401	C-3	TP403	B-7
D3	S-5	FL502	K-7	Q5	T-6	Q411	A-3	RV402	C-3	TP404	B-7
D4	K-4	FL503	G-4	Q6	S-6	Q412	B-4	RV403	B-4	TP501	J-5
D5	K-4	FL504	J-3	Q7	S-6	Q503	J-6	RV501	L-6	TP502	L-7
D6	L-4			Q8	R-7	Q504	K-6	RV502	K-5	TP503	J-7
D7	P-1	IC1	S-5	Q9	T-6	Q505	K-6	RV503	L-7	TP504	C-7
D251	R-4	IC2	R-7	Q10	R-5	Q506	J-5	RV504	D-6	TP505	H-1
D301	N-5	IC3	S-3	Q11	R-5	Q507	J-5	RV505	G-1	TP506	F-1
D302	N-5	IC4	S-2	Q13	T-4	Q508	H-4	RV506	D-1	TP507	F-2
D304	P-5	IC5	R-1	Q14	S-4	Q509	J-6	RV507	D-1	TP508	F-1
D305	M-6	IC6	N-1	Q15	S-4	Q510	J-7	RV508	E-1	TP509	F-1
D401	C-4	IC7	N-1	Q16	S-4	Q520	H-6	RV509	E-1	TP510	H-6
D402	C-4	IC8	N-3	Q17	S-2	Q521	F-2	RV510	E-1	TP512	F-2
D403	B-5	IC9	L-3	Q18	S-2	Q522	J-4	RV511	E-1	TP513	G-2
D404	A-5	IC10	K-3	Q19	S-1	Q523	F-3	RV513	H-7	TP514	G-2
D501	H-1	IC11	K-4	Q20	R-1	Q524	F-4	RV514	H-7	TP515	H-5
D502	G-1	IC12	B-2	Q21	M-2	Q526	G-3	RV515	J-7	TP516	G-6
D503	G-3	IC201	K-1	Q22	M-1	Q527	G-3	RV516	G-6	TP517	G-6
D505	G-3	IC202	L-1	Q23	P-3	Q528	G-6	RV517	J-3	TP518	F-5
D509	F-6	IC203	L-1	Q24	M-3	Q529	G-6	RV518	G-3	TP519	E-5
D510	F-6	IC204	K-2	Q25	L-3	Q530	G-7	RV519	H-6	TP520	C-5
D511	E-5	IC251	R-4	Q26	K-3	Q533	F-5	RV520	C-5	TP521	E-4
D512	E-5	IC301	N-5	Q27	L-3	Q534	F-6	RV521	D-4	TP522	E-3
D514	E-2	IC302	M-5	Q28	K-4	Q535	F-6	RV522	D-3	TP523	E-3
D515	E-2	IC303	M-5	Q29	K-4	Q536	F-7	RV523	D-3	TP524	E-3
D516	E-2	IC304	N-4	Q30	K-3	Q537	E-5	RV524	L-5	TP525	D-2
D517	E-2	IC305	L-5	Q31	J-2	Q538	D-5			TP528	H-5
D518	E-6	IC401	B-3	Q32	J-5	Q539	E-4	S301	N-6	TP529	H-4
D519	E-6	IC402	C-4	Q33	K-5	Q540	E-5	S501	F-1	TP530	D-4
D522	F-4	IC403	A-4	Q34	C-1	Q541	E-4			TP531	H-6
		IC404	B-6	Q35	B-1	Q542	E-5	T501	H-3	TP532	F-4
DL1	T-3	IC405	B-7	Q36	C-2	Q543	D-4			TP533	D-4
DL2	S-3	IC406	B-6	Q37	N-1	Q545	E-3	TP1	R-6		
DL3	N-2	IC407	B-6	Q38	C-3	Q546	D-2	TP2	S-6	X501	H-3
DL4	J-3	IC408	B-5	Q39	D-2	Q547	D-2	TP3	S-7		
DL502	K-6	IC501	M-6	Q40	R-3	Q548	D-2	TP4	R-5		
DL504	D-7	IC502	M-7	Q41	R-3	Q549	E-6	TP5	T-4		
DL506	E-6	IC503	L-6	Q42	A-1	Q550	L-5	TP6	T-3		
		IC504	K-5	Q43	T-7	Q551	E-4	TP7	S-2		
E1	P-5	IC505	K-7	Q46	K-4	Q553	F-3	TP8	P-1		
E2	T-2	IC506	D-7	Q48	L-4			TP9	M-2		
E3	M-3	IC507	E-2	Q201	J-2	RV1	R-7	TP10	P-3		
E4	D-1	IC508	E-1	Q202	L-2	RV2	R-7	TP14	M-3		
E201	L-2	IC509	H-4	Q301	N-6	RV3	S-7	TP15	J-5		
E301	M-4	IC510	H-6	Q302	N-6	RV4	S-6	TP16	D-2		
E401	A-3	IC511	G-2	Q304	N-5	RV5	R-7	TP17	S-6		
E402	A-6	IC512	H-5	Q305	P-5	RV6	S-6	TP18	S-6		
E501	K-7	IC513	D-6	Q307	N-5	RV8	S-4	TP19	B-1		
E502	D-2	IC514	E-6	Q308	N-5	RV9	S-1				
E503	F-1	IC515	D-5	Q309	M-5	RV10	S-3				
E504	F-5	IC516	E-4	Q401	C-4	RV11	M-2				
E505	C-5	IC517	E-4	Q402	C-4	RV12	M-2				

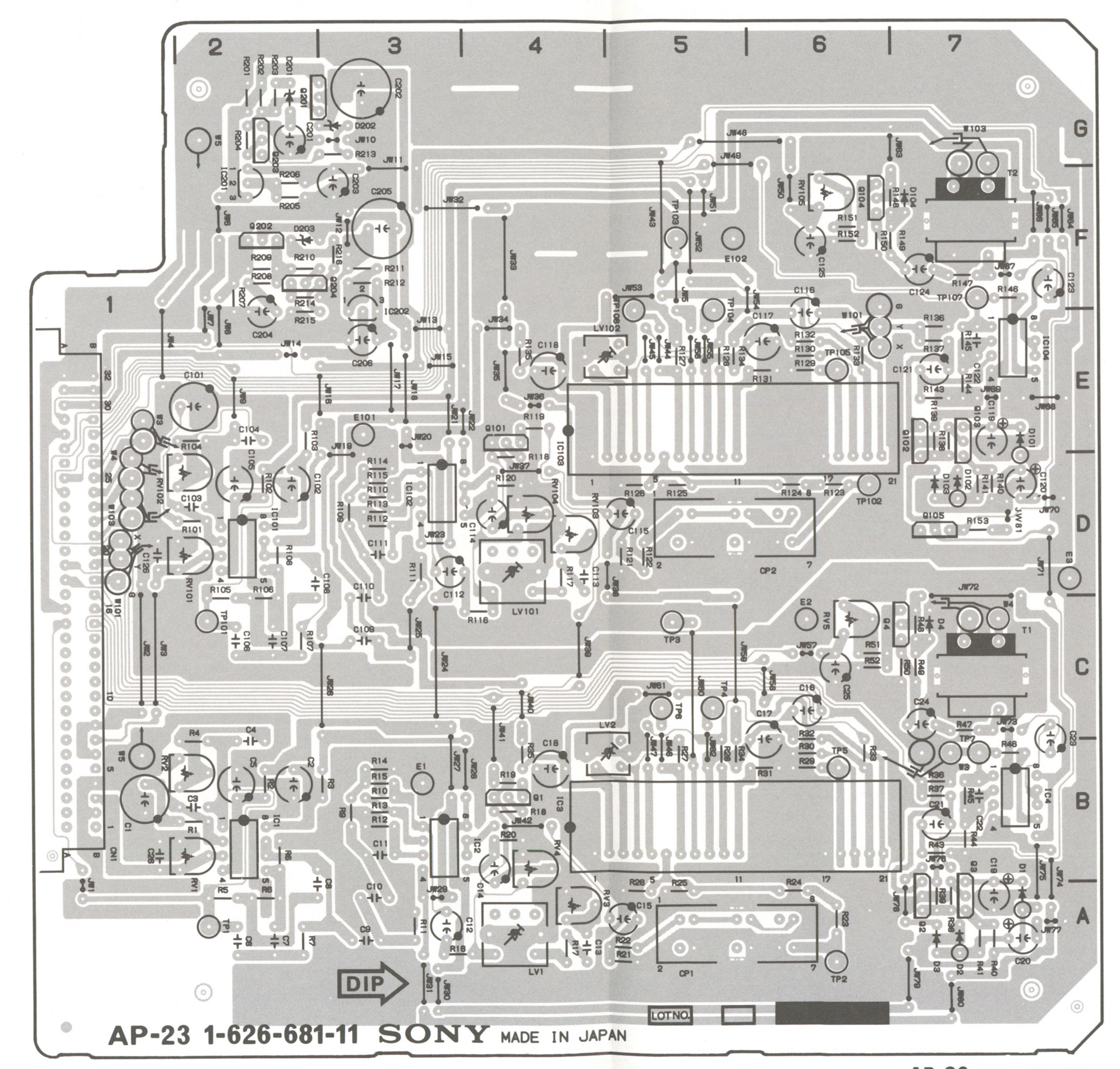


DM-54A —COMPONENT SIDE—
1-622-707-21(1)
BVU-900

AP-23; AUDIO PB/DOLBY PROCESSOR

AP-23(1-626-681-11)

CP1	A-5	T1	C-7
CP2	D-5	T2	F-7
D1	A-7	TP1	A-2
D2	A-7	TP2	A-6
D3	A-7	TP3	C-5
D4	C-7	TP4	C-5
D101	E-7	TP5	B-6
D102	D-7	TP6	C-5
D103	D-7	TP7	B-7
D104	F-7	TP101	C-2
D201	G-2	TP102	D-6
D202	G-3	TP103	F-5
D203	F-2	TP104	F-5
		TP105	E-6
E1	B-3	TP106	F-5
E2	C-6	TP107	F-7
E3	D-7		
E101	E-3		
E102	F-5		
IC1	B-2		
IC2	B-3		
IC3	B-5		
IC4	B-7		
IC101	D-2		
IC102	D-3		
IC103	E-5		
IC104	E-7		
IC201	F-2		
IC202	F-3		
LV1	A-4		
LV2	B-4		
LV101	D-4		
LV102	E-4		
Q1	B-4		
Q2	A-7		
Q3	A-7		
Q4	C-7		
Q101	E-4		
Q102	E-7		
Q103	E-7		
Q104	F-6		
Q105	D-7		
Q201	G-2		
Q202	F-2		
Q203	G-2		
Q204	F-2		
RV1	B-2		
RV2	B-1		
RV3	A-4		
RV4	B-4		
RV5	C-6		
RV101	D-2		
RV102	D-2		
RV103	D-4		
RV104	D-4		
RV105	F-6		

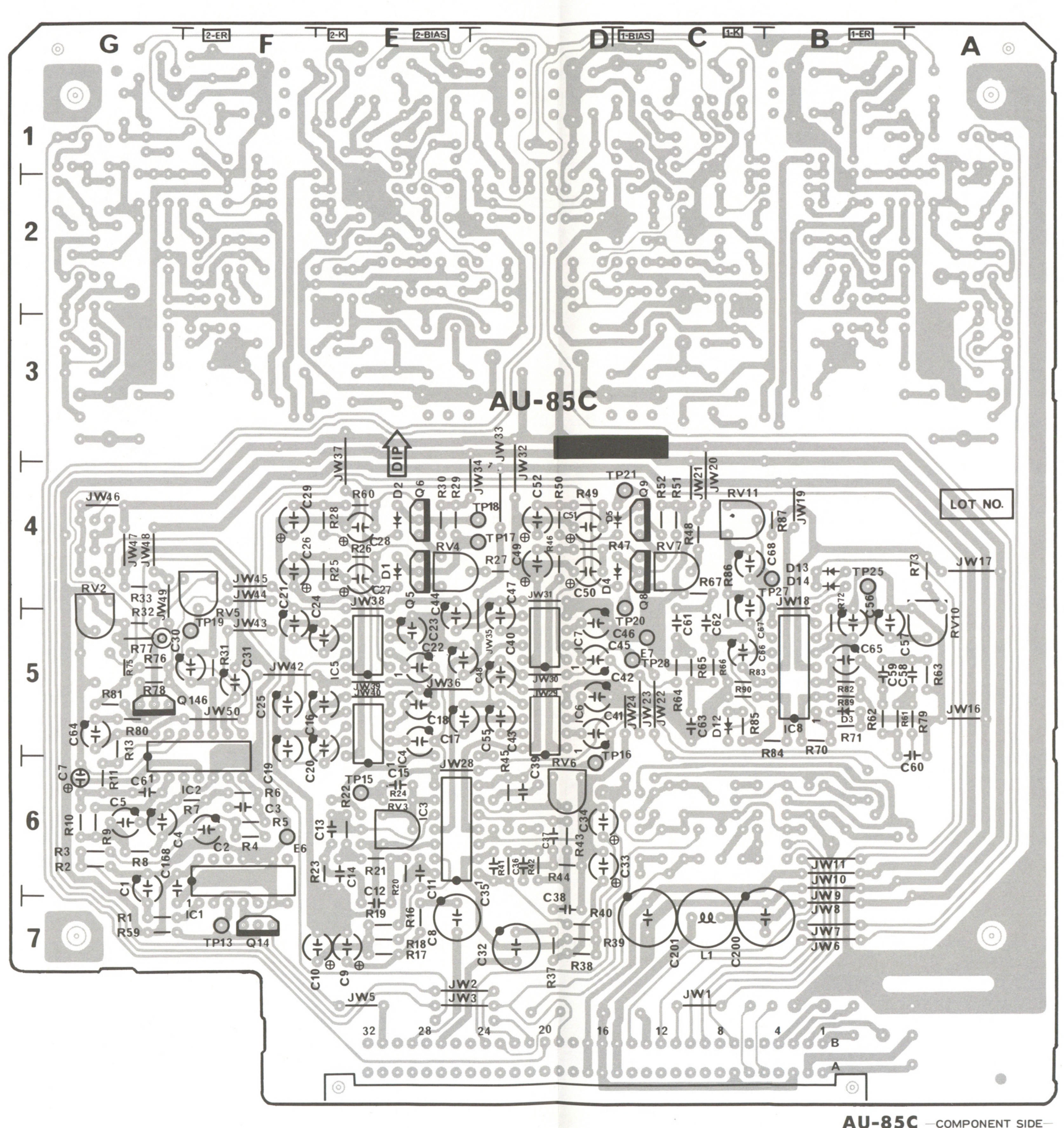


AP-23 —COMPONENT SIDE—
1-626-681-11(1)
BVU-900

AU-85C; DOLBY AUTO DETECTOR

AU-85C(1-622-702-31)

D1	E-4
D2	E-4
D3	B-5
D4	C-4
D5	C-4
D12	C-5
D13	B-4
D14	B-4
E6	F-6
E7	C-5
IC1	F-6
IC2	F-6
IC3	E-6
IC4	E-5
IC5	E-5
IC6	D-5
IC7	D-5
IC8	B-5
Q5	E-4
Q6	E-4
Q8	C-4
Q9	C-4
Q14	F-7
Q146	G-5
RV2	G-5
RV3	E-6
RV4	E-4
RV5	F-4
RV6	D-6
RV7	C-4
RV10	A-5
RV11	C-4
TP13	F-7
TP15	E-6
TP16	D-6
TP17	D-4
TP18	D-4
TP19	F-5
TP20	C-4
TP21	C-4
TP25	B-4
TP27	B-4
TP28	C-5

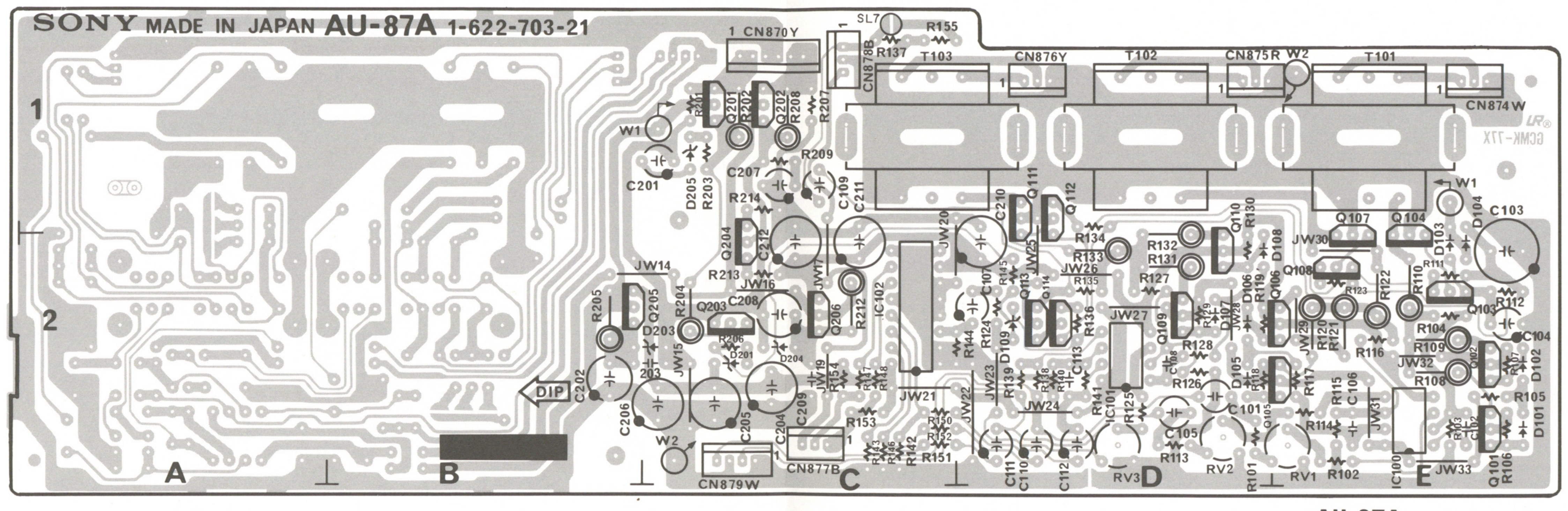


AU-85C —COMPONENT SIDE—
1-622-702-31(1)
BVU-900

AU-87A(1-622-703-21)

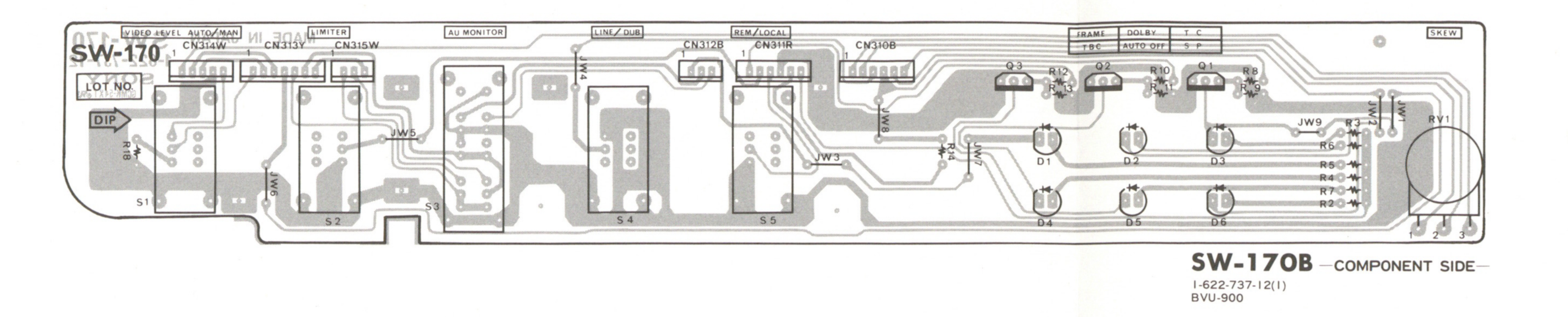
CN870	C-1
CN874	E-1
CN875	D-1
CN876	D-1
CN877	C-2
CN878	C-1
CN879	C-2
D101	E-2
D102	E-2
D103	E-2
D104	E-2
D105	D-2
D106	D-2
D107	D-2
D108	D-2
D109	D-2
D201	C-2
D203	C-2
D204	C-2
D205	C-1
IC100	E-2
IC101	D-2
IC102	C-2
Q101	E-2
Q102	E-2
Q103	E-2
Q104	E-1
Q105	E-2
Q106	E-2
Q107	E-1
Q108	E-2
Q109	D-2
Q110	D-2
Q111	D-1
Q112	D-1
Q113	D-2
Q114	D-2
Q201	C-1
Q202	C-1
Q203	C-2
Q204	C-2
Q205	B-2
Q206	C-2
RV1	E-2
RV2	D-2
RV3	D-2

AU-87A; OUTPUT/MONITOR AMPLIFIER

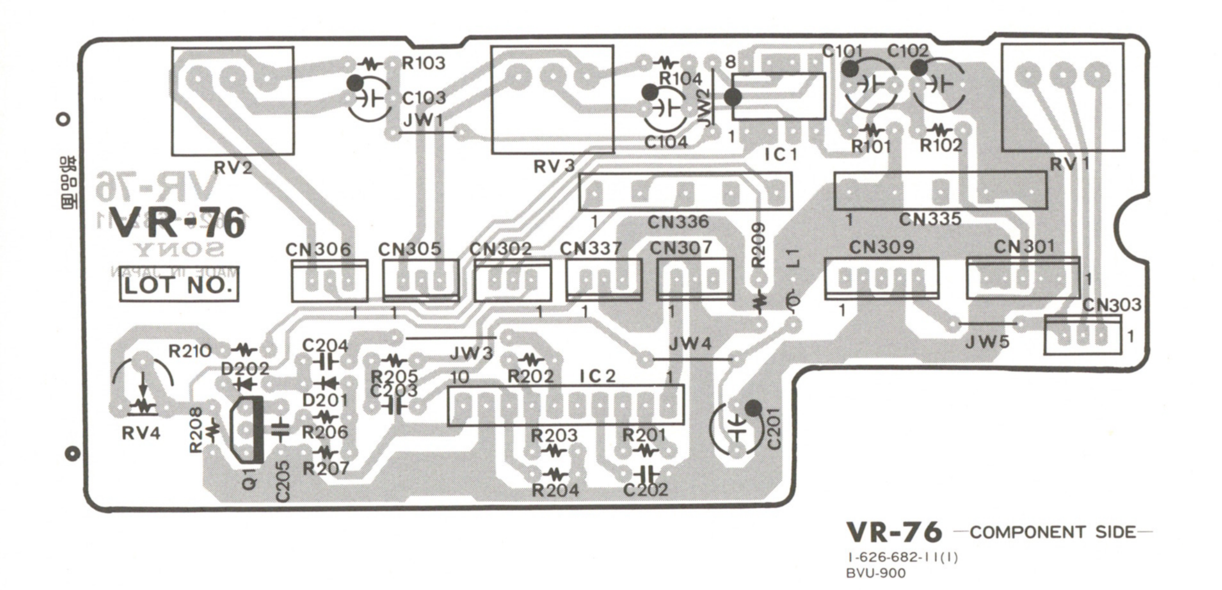


AU-87A —COMPONENT SIDE—
1-622-703-21(1)
BVU-900

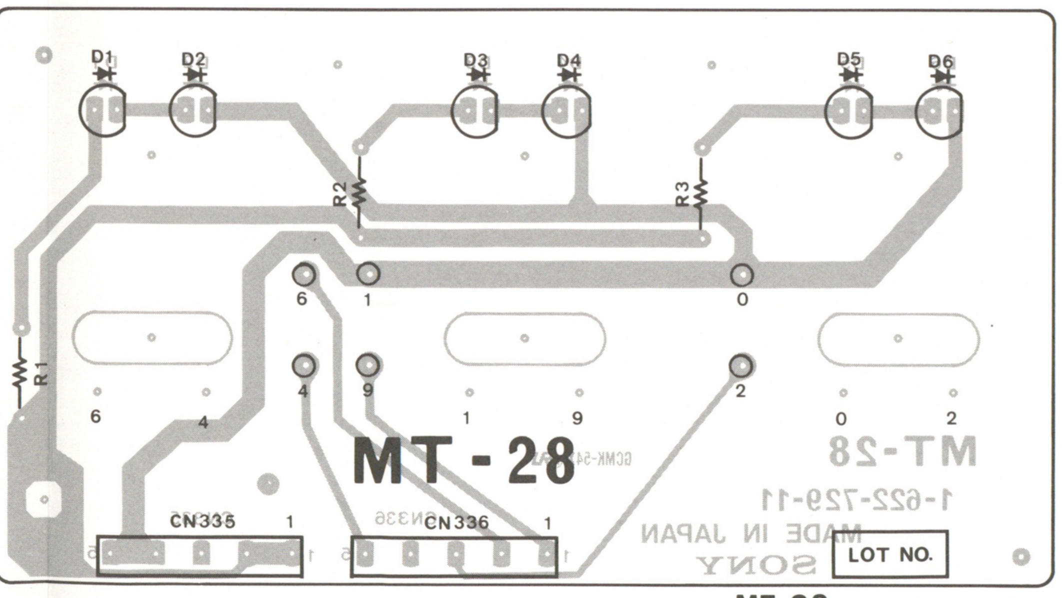
SW-170B; AUDIO MONITOR SELECT/SELECT SWITCH/WARNING INDICATOR
VR-76; PB LEVEL/TRACKING CONTROL
MT-28; LEVEL METER



SW-170B —COMPONENT SIDE—
1-622-737-12(1)
BVU-900



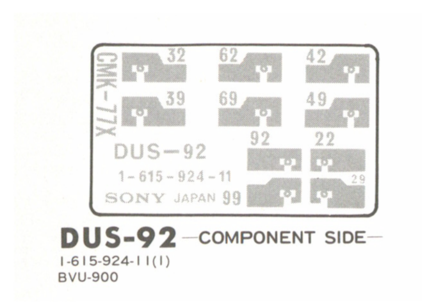
VR-76 —COMPONENT SIDE—
1-626-682-11(1)
BVU-900



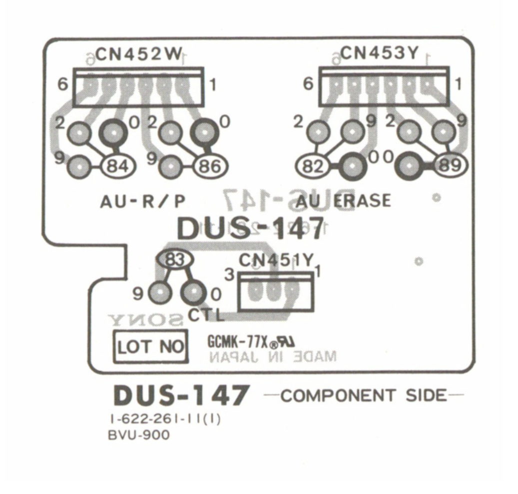
MT-28 —COMPONENT SIDE—
1-622-729-11(1)
BVU-900

DUS-92, DUS-147, HP-28, VR-49

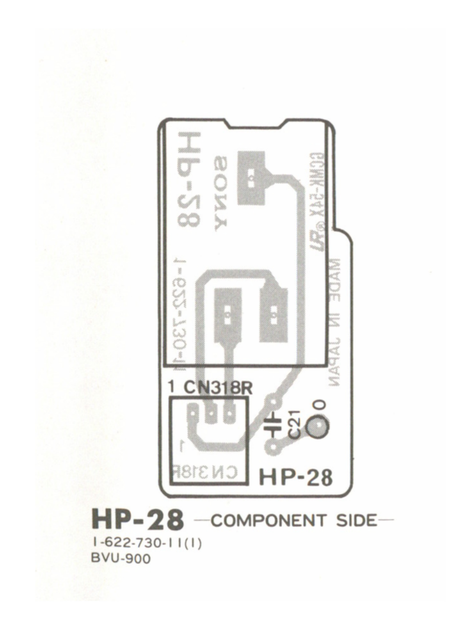
DUS-92; AUDIO HEAD
DUS-147; JUNCTION BOARD FOR AUDIO HEAD
HP-28; HEADPHONES
VR-49; HEADPHONES LEVEL CONTROL



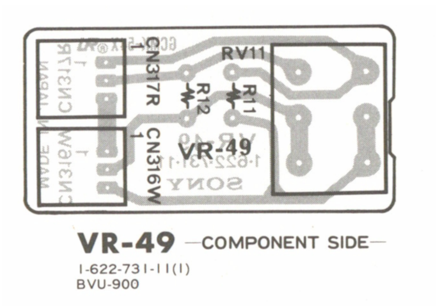
DUS-92 —COMPONENT SIDE—
1-615-924-11(1)
BVU-900



DUS-147 —COMPONENT SIDE—
1-622-261-11(1)
BVU-900



HP-28 —COMPONENT SIDE—
1-622-730-11(1)
BVU-900



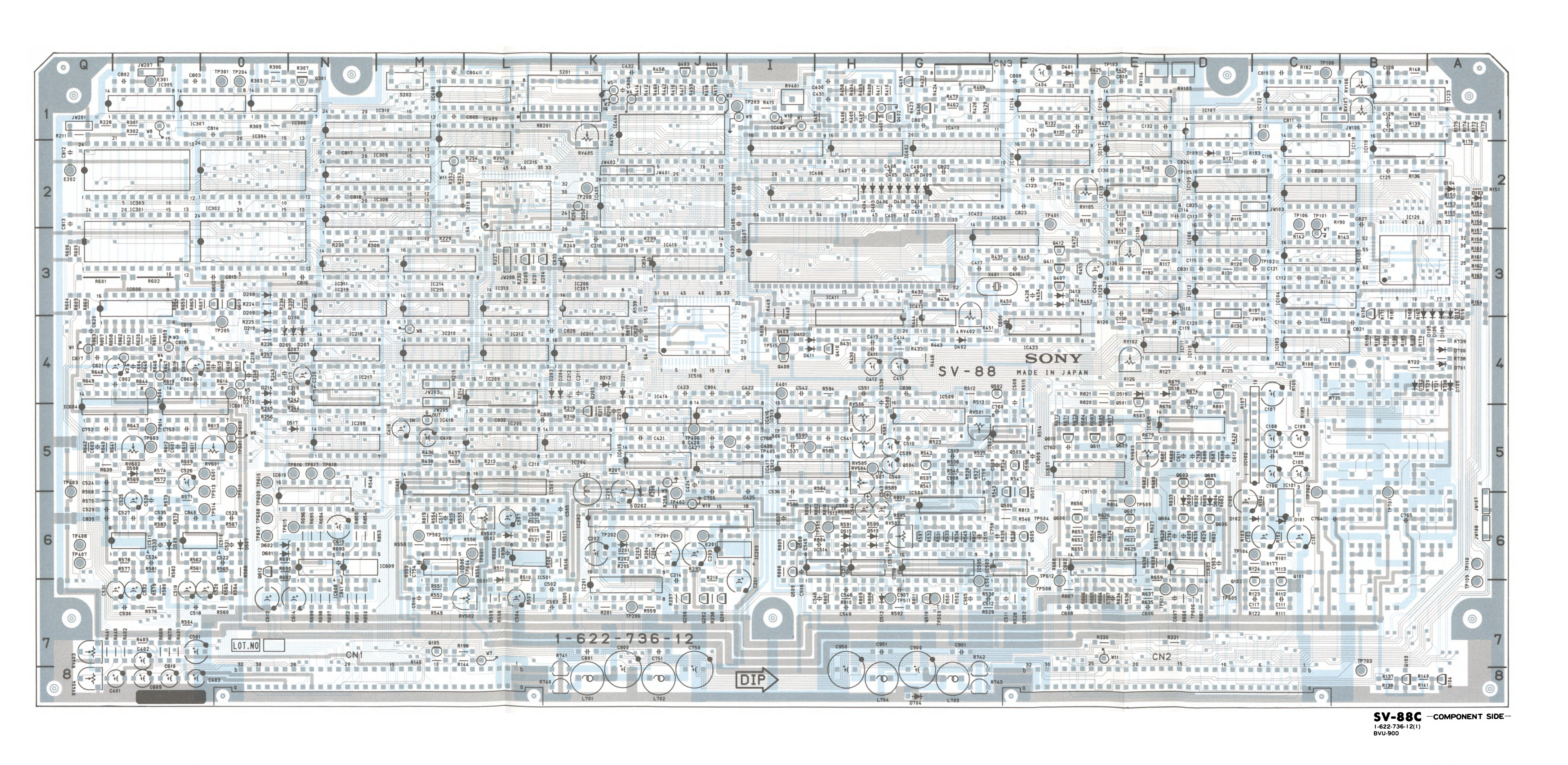
VR-49 —COMPONENT SIDE—
1-622-731-11(1)
BVU-900

SV-88C SV-88C

SV-88C; DRUM/CAPSTAN/REEL SERVO

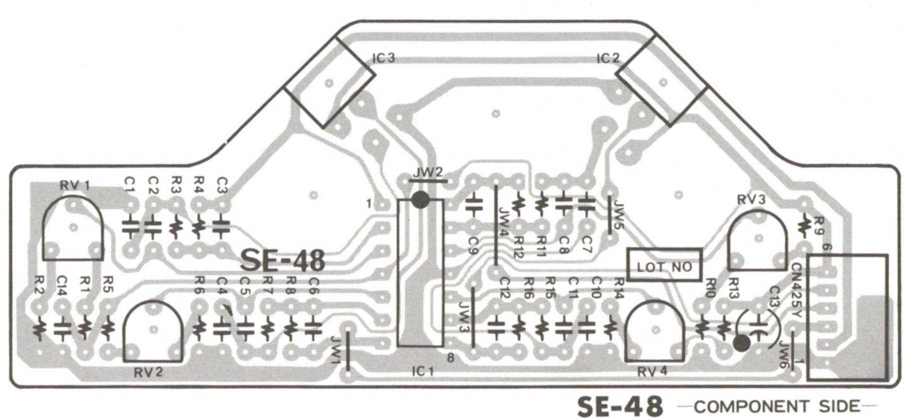
SV-88C(1-622-736-12)

CN1	N-8	D701	A-4	IC304	O-2	Q105	M-7	RV405	K-1	TP605	D-7
CN2	E-8	D702	B-4	IC305	P-1	Q106	B-3	RV501	G-5	TP606	D-7
CN3	G-1	D704	G-8	IC306	O-1	Q201	J-7	RV502	L-7	TP607	O-6
		D705	A-4	IC307	O-1	Q202	J-7	RV503	L-6	TP608	O-6
D101	C-6	D706	A-4	IC308	M-2	Q203	K-5	RV504	H-5	TP609	O-6
D102	D-6			IC309	M-2	Q204	L-3	RV505	H-5	TP610	O-5
D103	A-2	E101	C-1	IC310	M-1	Q205	L-3	RV506	H-5	TP611	E-7
D104	A-2	E201	J-6	IC311	N-3	Q206	J-7	RV507	H-6	TP612	F-7
D105	B-3	E202	Q-2	IC401	M-5	Q207	N-4	RV601	O-5	TP613	O-5
D106	A-3	E301	P-1	IC402	H-2	Q301	N-1	RV602	P-5	TP614	P-5
D107	A-3	E401	I-4	IC403	I-2	Q401	H-1	RV603	E-5	TP615	N-6
D108	A-3	E501	G-7	IC404	J-1	Q402	H-1			TP616	N-5
D109	D-2	E601	O-5	IC405	J-2	Q403	J-1	S201	K-1	TP617	N-5
D110	D-3			IC406	I-2	Q404	J-1	S202	M-1	TP618	N-5
D201	K-6	IC101	C-6	IC407	H-3	Q405	G-1			TP701	B-6
D202	J-5	IC102	D-5	IC408	L-1	Q406	G-1	TP101	C-2	TP702	C-6
D203	K-4	IC103	C-4	IC409	L-1	Q407	F-3	TP102	C-3	TP703	B-8
D204	K-4	IC104	C-3	IC410	J-3	Q408	I-4	TP103	E-1		
D205	O-4	IC105	C-3	IC411	H-4	Q409	I-4	TP104	D-6	X401	F-3
D206	N-4	IC106	D-3	IC412	G-4	Q410	H-4	TP105	D-2		
D207	N-4	IC107	D-1	IC413	G-2	Q411	F-3	TP106	C-2		
D208	O-3	IC108	E-3	IC414	J-5	Q412	F-3	TP108	C-1		
D209	O-3	IC109	D-2	IC415	J-5	Q501	E-5	TP109	A-7		
D210	O-4	IC110	D-4	IC416	I-5	Q502	F-4	TP110	A-6		
D211	K-4	IC111	E-4	IC417	I-5	Q503	F-5	TP201	J-6		
D212	K-4	IC112	D-3	IC418	M-5	Q504	G-5	TP202	K-6		
D213	O-5	IC113	E-2	IC420	F-3	Q505	F-6	TP203	I-1		
D214	O-4	IC114	F-1	IC422	G-2	Q506	F-6	TP204	O-1		
D401	F-1	IC115	E-1	IC423	F-4	Q507	F-6	TP205	O-4		
D402	G-4	IC116	F-2	IC501	L-6	Q508	I-6	TP206	K-7		
D403	H-2	IC117	E-2	IC502	F-5	Q509	I-6	TP208	K-2		
D404	H-2	IC118	C-2	IC503	F-6	Q510	G-7	TP301	O-1		
D405	H-2	IC119	B-2	IC504	G-6	Q511	D-4	TP401	F-2		
D406	H-2	IC120	B-3	IC505	G-6	Q602	O-3	TP402	J-6		
D407	G-2	IC122	C-1	IC506	M-6	Q603	D-5	TP403	Q-5		
D408	H-2	IC123	B-1	IC507	L-5	Q604	D-6	TP404	M-7		
D409	G-2	IC125	E-3	IC509	G-5	Q605	D-5	TP405	I-5		
D410	G-2	IC201	K-7	IC510	O-6	Q606	D-6	TP406	J-5		
D411	I-4	IC202	J-6	IC511	P-6	Q607	E-6	TP407	Q-6		
D412	I-4	IC203	I-6	IC512	I-5	Q608	F-6	TP408	Q-6		
D413	F-3	IC204	K-5	IC513	I-5	Q609	E-5	TP501	L-6		
D414	F-3	IC205	L-5	IC514	H-6	Q610	F-5	TP502	M-6		
D501	L-7	IC206	K-3	IC515	H-6	Q611	E-5	TP503	G-7		
D502	L-6	IC207	K-3	IC516	J-4	Q612	O-6	TP504	F-6		
D507	O-6	IC208	N-5	IC601	O-5	Q613	O-3	TP505	I-6		
D508	P-5	IC209	L-4	IC602	E-6			TP506	I-5		
D509	P-6	IC210	M-4	IC603	D-6	RB201	K-1	TP507	H-5		
D512	H-7	IC211	K-4	IC604	Q-5			TP508	F-7		
D513	H-6	IC212	L-4	IC605	D-5	RV101	E-3	TP509	E-6		
D514	H-6	IC213	L-3	IC606	P-3	RV102	E-4	TP510	O-6		
D515	H-6	IC214	M-3	IC607	F-5	RV103	D-1	TP511	H-7		
D516	H-6	IC215	M-3	IC608	N-6	RV104	E-1	TP512	H-6		
D517	N-5	IC216	L-2	IC609	N-6	RV105	E-2	TP513	O-6		
D518	D-4	IC217	N-4	IC610	N-6	RV106	B-1	TP514	O-6		
D519	E-4	IC218	N-4			RV107	B-1	TP515	I-4		
D601	O-6	IC219	N-3	Q101	C-7	RV401	I-1	TP601	O-5		
D602	O-6	IC301	P-3	Q102	D-7	RV402	G-3	TP602	O-4		
D603	D-6	IC302	O-3	Q103	B-8	RV403	Q-7	TP603	P-5		
D604	D-6	IC303	P-2	Q104	A-8	RV404	Q-8	TP604	P-4		

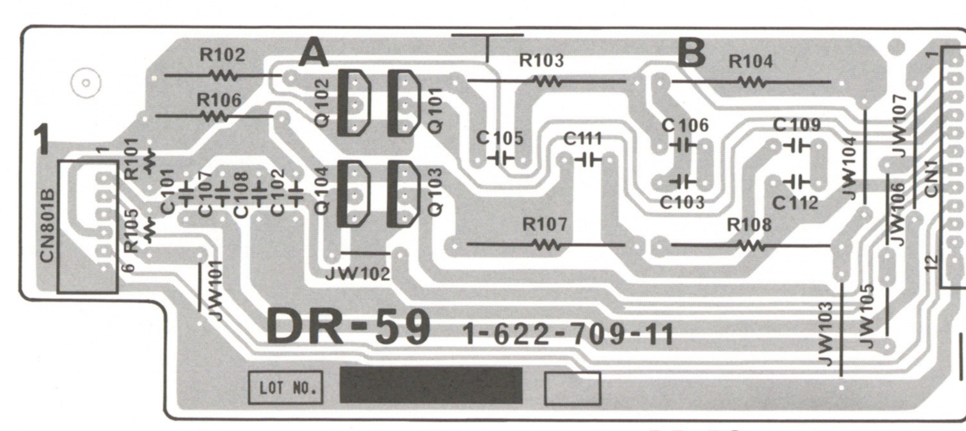


SV-88C —COMPONENT SIDE—
1-622-736-12(1)
BVU-900

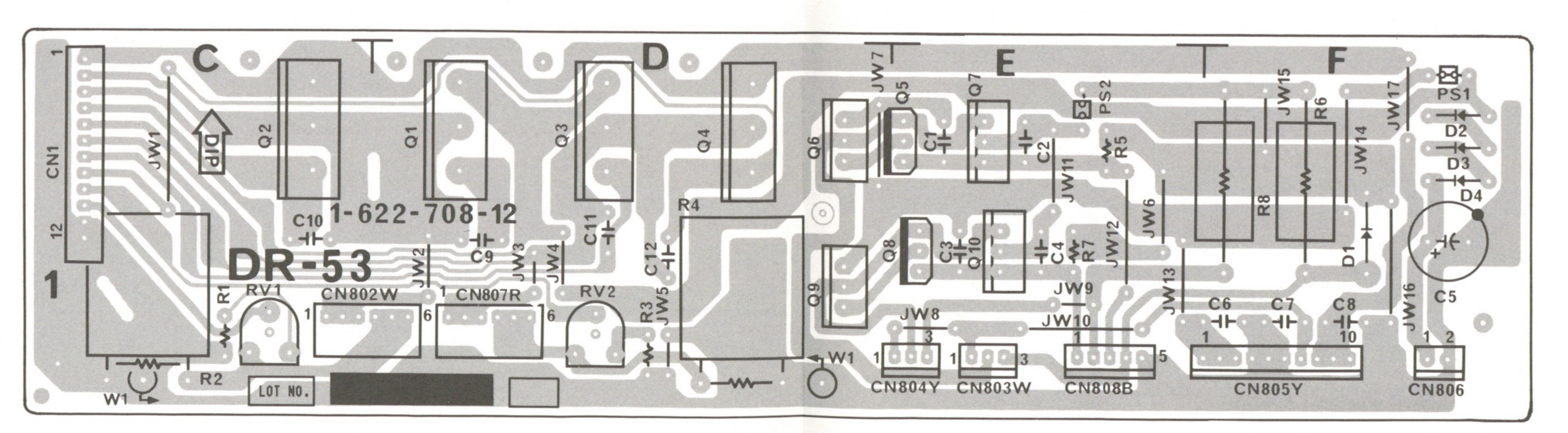
DR-53; REEL/CAPSTAN/DRUM MOTOR DRIVE
DR-59; REEL MOTOR DRIVE
SE-48; REEL ROTATION DETECTOR



SE-48 —COMPONENT SIDE—
1-622-735-11(1)
BVU-900



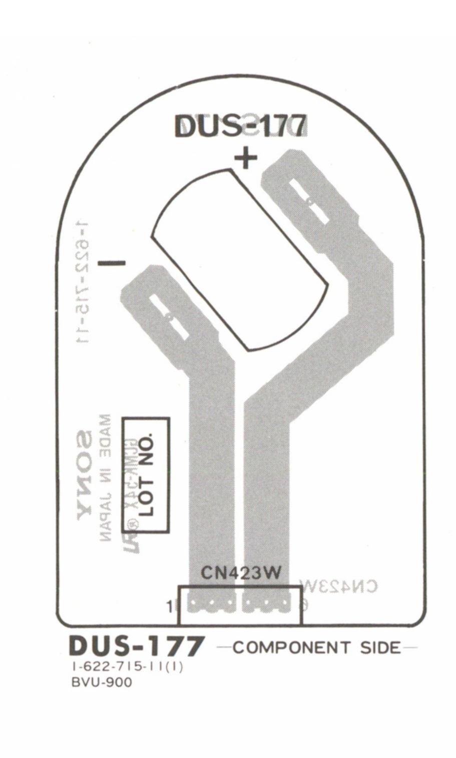
DR-59 —COMPONENT SIDE—
1-622-709-11(1)
BVU-900



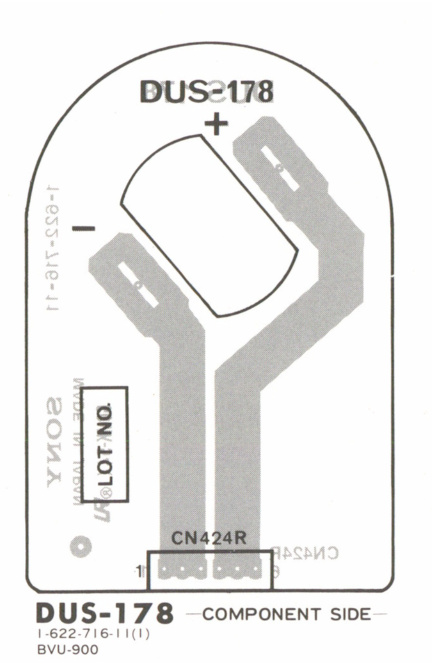
DR-53 —COMPONENT SIDE—
1-622-708-12(1)
BVU-900

DUS-177, DUS-178, LE-53, LE-54, PTC-28, PTC-29

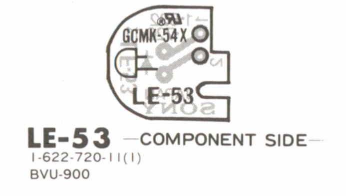
DUS-177; **T-REEL MOTOR**
DUS-178; **S-REEL MOTOR**
LE-53; **S-TENSION LED**
LE-54; **T-TENSION LED**
PTC-28; **S-TENSION CdS**
PTC-29; **T-TENSION CdS**



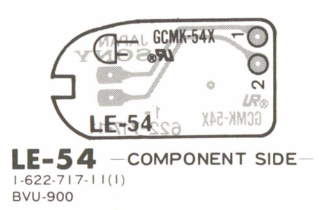
DUS-177 —COMPONENT SIDE—
1-622-715-11(1)
BVU-900



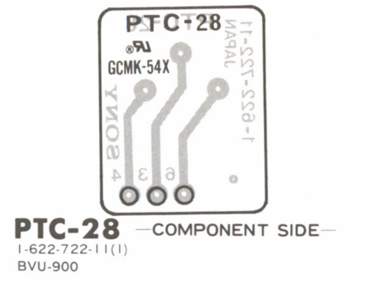
DUS-178 —COMPONENT SIDE—
1-622-716-11(1)
BVU-900



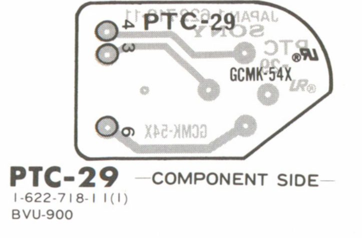
LE-53 —COMPONENT SIDE—
1-622-720-11(1)
BVU-900



LE-54 —COMPONENT SIDE—
1-622-717-11(1)
BVU-900



PTC-28 —COMPONENT SIDE—
1-622-722-11(1)
BVU-900



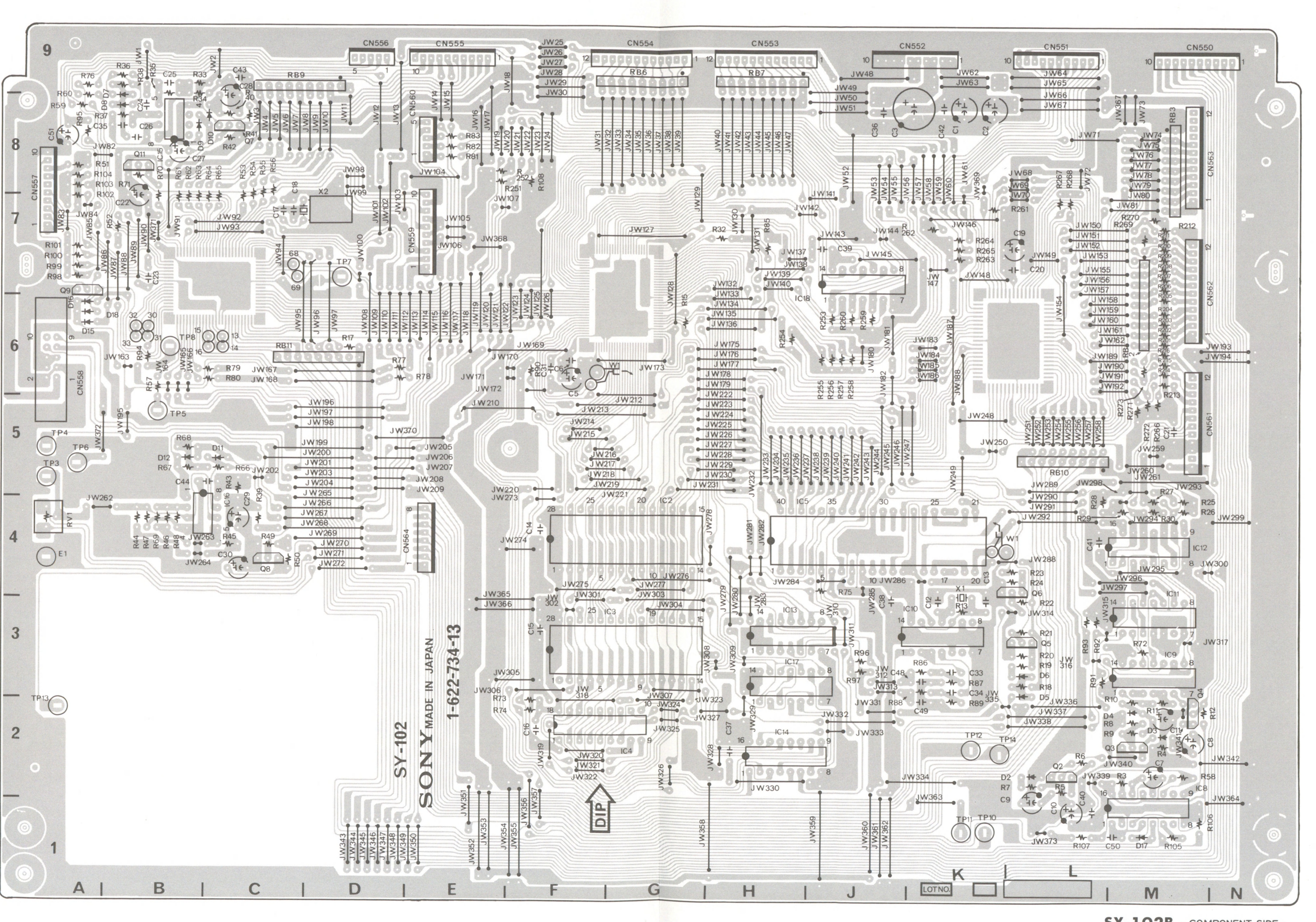
PTC-29 —COMPONENT SIDE—
1-622-718-11(1)
BVU-900

SY-102B; SYSTEM CONTROL

SY-102B(1-622-734-13)

CN550	M-9
CN551	L-9
CN552	K-9
CN553	H-9
CN554	G-9
CN555	E-9
CN556	D-9
CN557	A-8
CN558	A-6
CN559	E-7
CN560	E-8
CN561	M-5
CN562	M-7
CN563	M-8
CN564	E-4
D2	L-2
D3	M-2
D4	M-2
D5	L-3
D6	L-3
D7	B-8
D8	B-8
D9	B-8
D10	C-8
D11	C-5
D12	B-5
D15	A-6
D16	A-6
D17	M-1
D18	A-6
E1	A-4
IC2	G-4
IC3	G-3
IC4	G-2
IC5	J-4
IC8	M-1
IC9	M-3
IC10	K-3
IC11	M-3
IC12	M-4
IC13	H-3
IC14	H-2
IC15	B-8
IC16	C-4
IC17	H-3
IC18	J-7
Q2	L-2
Q3	M-2
Q4	M-2
Q5	L-3
Q6	L-4
Q7	C-8
Q8	C-4
Q9	A-7
Q11	B-8

RB2	M-6
RB3	M-8
RB6	G-9
RB7	H-9
RB9	C-9
RB10	L-5
RB11	D-6
RV1	A-4
TP3	A-5
TP4	A-5
TP5	B-5
TP6	A-5
TP7	D-7
TP8	B-6
TP10	K-1
TP11	K-1
TP12	K-2
TP13	A-2
TP14	K-2
X1	K-4
X2	D-7



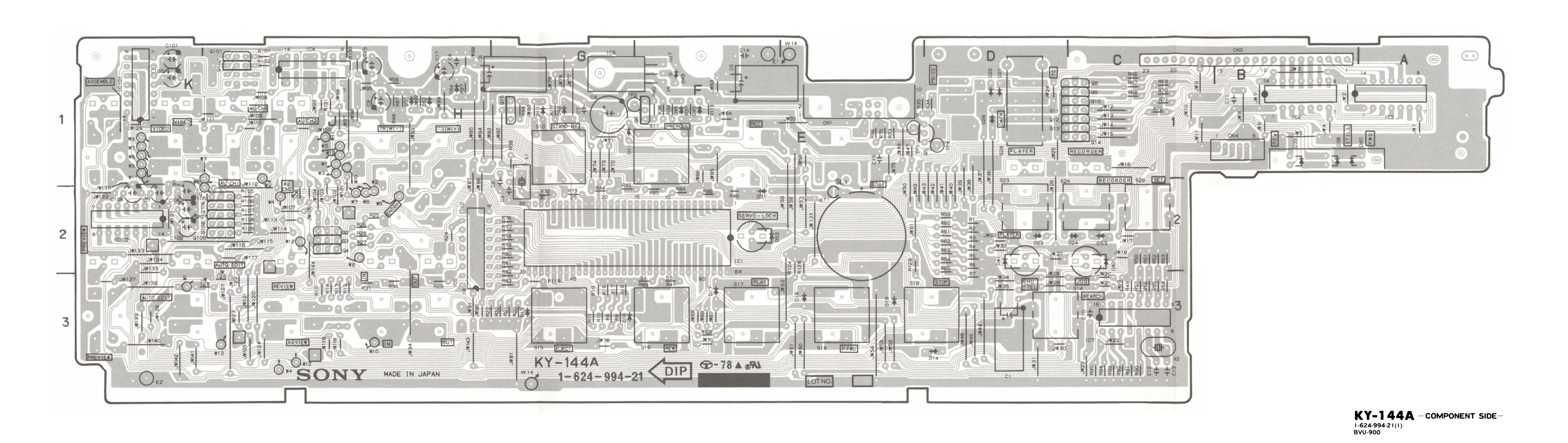
SY-102B —COMPONENT SIDE—
1-622-734-13(1)
BVU-900

KY-144A, DP-62 KY-144A, DP-62

KY-144A; FUNCTION KEY BOARD
DP-62; DISPLAY

KY-144A(1-624-994-21)

CN1	E-1
CN3	B-1
CN4	B-1
D10	G-1
D11	G-1
D14	D-3
D15	G-3
D16	G-3
D17	F-3
D18	E-3
D19	E-3
D22	D-1
D23	D-2
D24	C-2
D28	D-1
D38	B-1
D39	B-1
D40	A-1
D41	D-2
D42	C-2
D45	F-1
D46	F-1
D48	G-1
D49	F-1
D50	H-1
D51	F-1
D52	H-1
D53	F-2
D54	H-1
D55	C-2
E1	F-1
E2	K-3
IC1	F-2
IC2	B-1
IC3	A-1
IC4	J-1
IC5	H-2
IC6	G-1
IC7	C-3
IC101	K-1
IC102	K-2
Q2	J-2
Q3	J-2
Q4	J-2
Q5	D-1
Q6	F-1
Q8	C-1
Q9	C-1
Q10	C-1
Q11	C-1
Q12	C-1
Q13	C-1
Q14	C-1
Q15	G-1
Q101	J-1
Q102	J-1
Q105	J-2
Q106	J-2
Q107	J-2
Q108	J-2
Q109	J-2
S10	G-1
S11	F-1
S14	D-3
S15	G-3
S16	F-3
S17	F-3
S18	E-3
S19	D-3
S23	D-2
S24	C-2
S28	D-1
S29	C-2
TP1	E-1
TP2	G-1
TP4	D-1
X1	G-2
X2	C-3

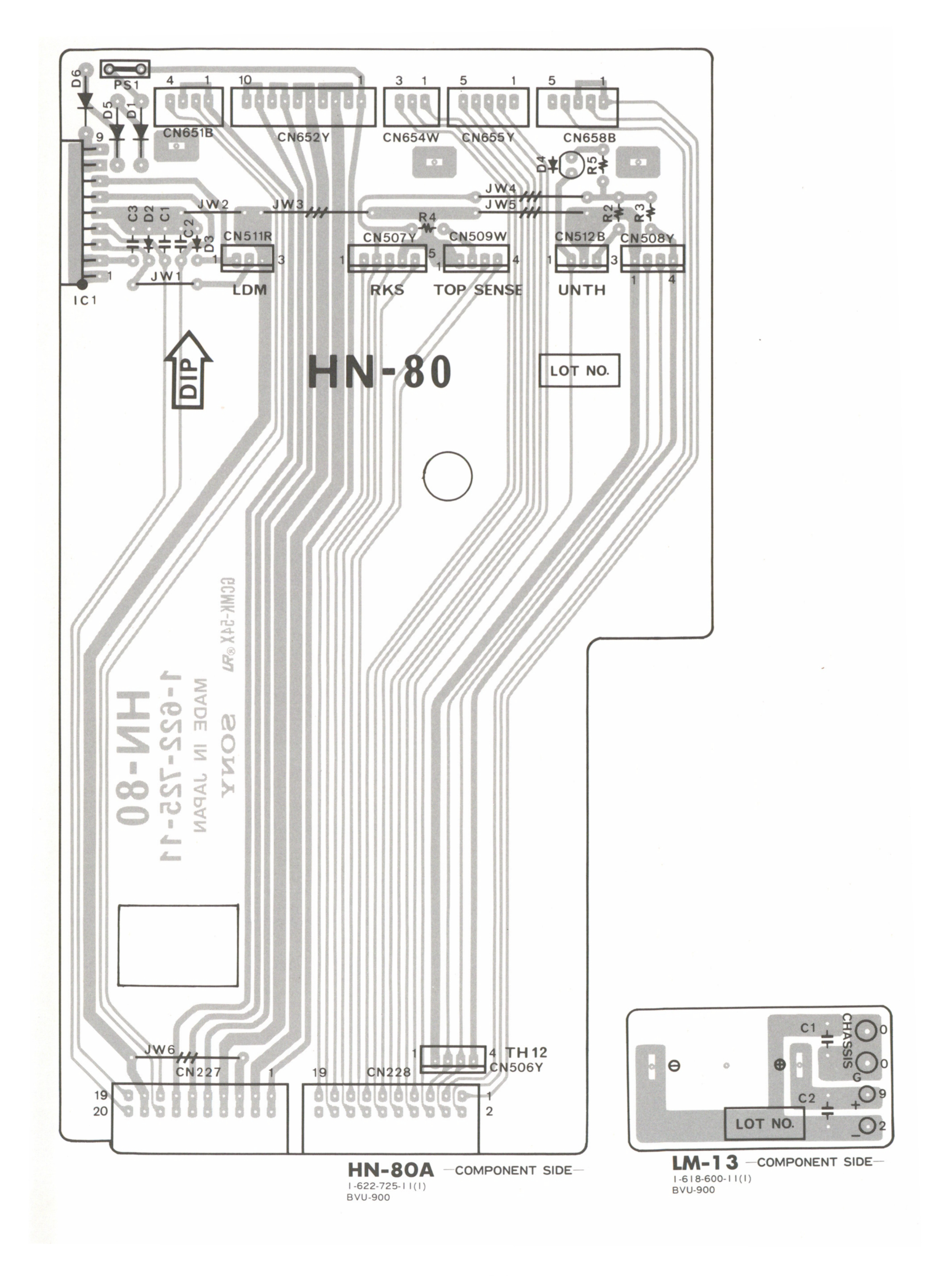


KY-144A —COMPONENT SIDE—
1-624-994-21(1)
BVU-900

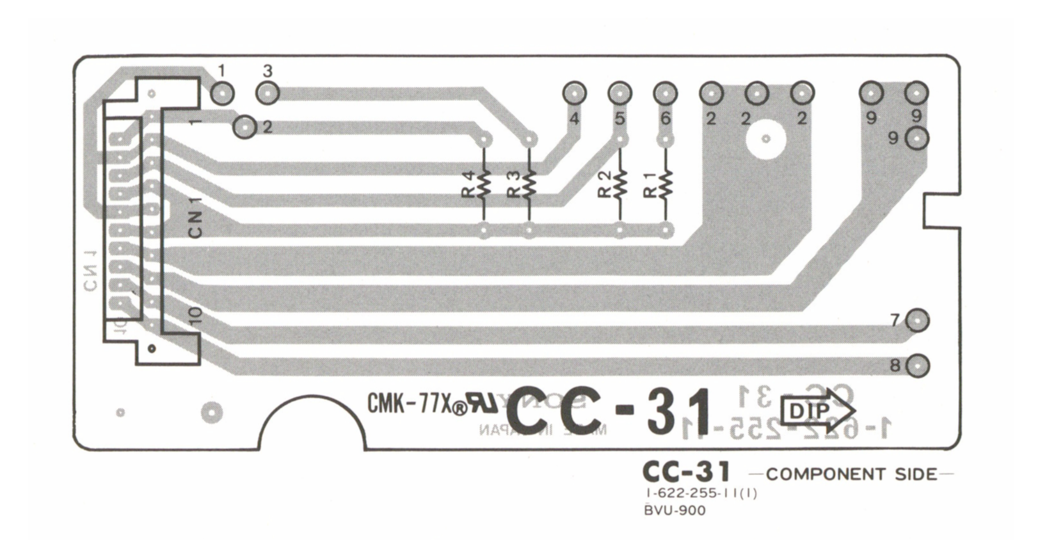
SONY
DP-62
MADE IN JAPAN
CN3
S201
S202
LAP
RESET
D201
D202
D203
D204
1-622-733-12

DP-62 —COMPONENT SIDE—
1-622-733-12(1)
BVU-900

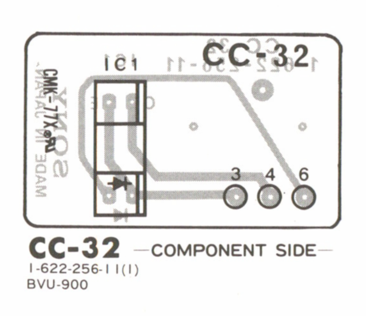
HN-80A; THREADING MOTOR DRIVER/OTHERS
LM-13; THREADING MOTOR



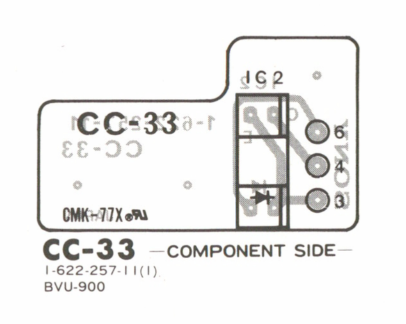
CC-31; CASSETTE COMPARTMENT DRIVER
CC-32; CASSETTE IN DETECTOR
CC-33; CASSETTE DOWN DETECTOR



CC-31 —COMPONENT SIDE—
1-622-255-11(1)
BVU-900

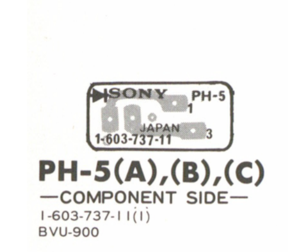


CC-32 —COMPONENT SIDE—
1-622-256-11(1)
BVU-900

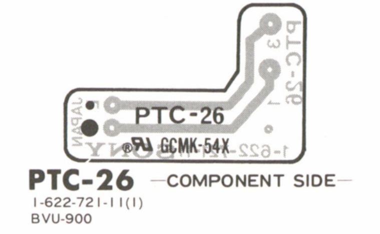


CC-33 —COMPONENT SIDE—
1-622-257-11(1)
BVU-900

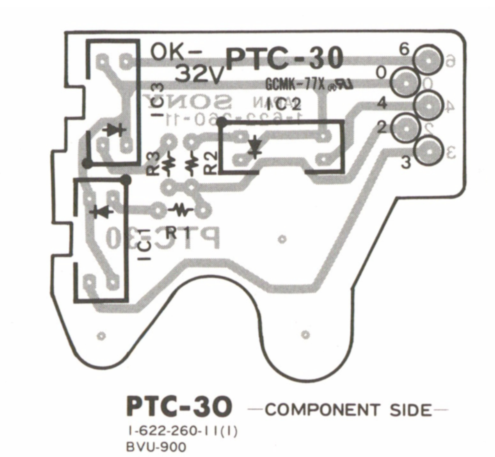
PH-5(A); TAPE TOP LED
PH-5(B); TAPE TOP SENSOR
PH-5(C); TAPE END LED
PTC-26; TAPE END SENSOR
PTC-30; SP, KCA DETECTOR
PTC-32; SEARCH DIAL
PTC-33; FR STOP DETECTOR
PTC-34; UNTHREAD END DETECTOR



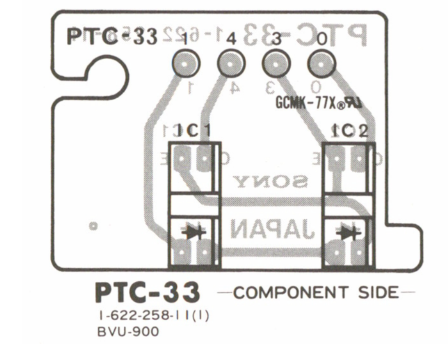
PH-5(A),(B),(C) —COMPONENT SIDE—
1-603-737-11(1)
BVU-900



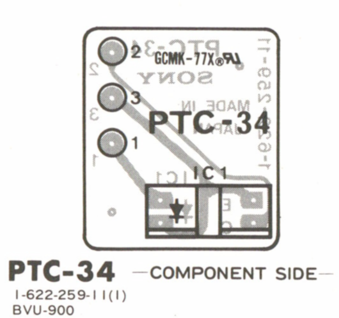
PTC-26 —COMPONENT SIDE—
1-622-721-11(1)
BVU-900



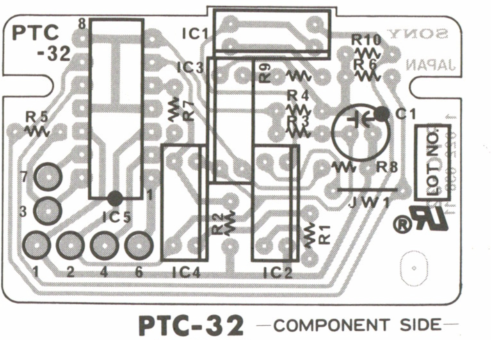
PTC-30 —COMPONENT SIDE—
1-622-260-11(1)
BVU-900



PTC-33 —COMPONENT SIDE—
1-622-258-11(1)
BVU-900

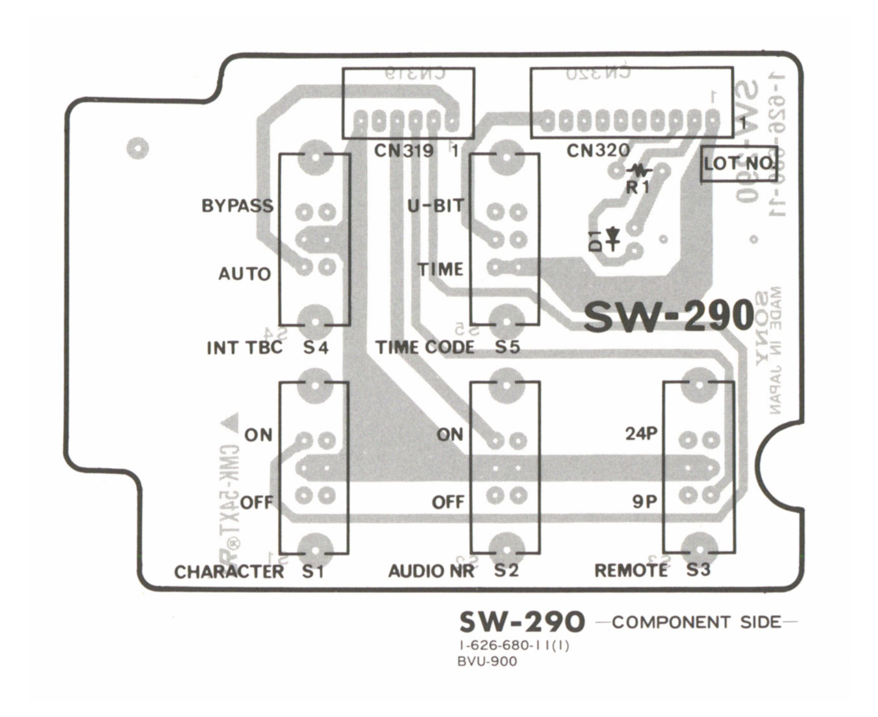


PTC-34 —COMPONENT SIDE—
1-622-259-11(1)
BVU-900



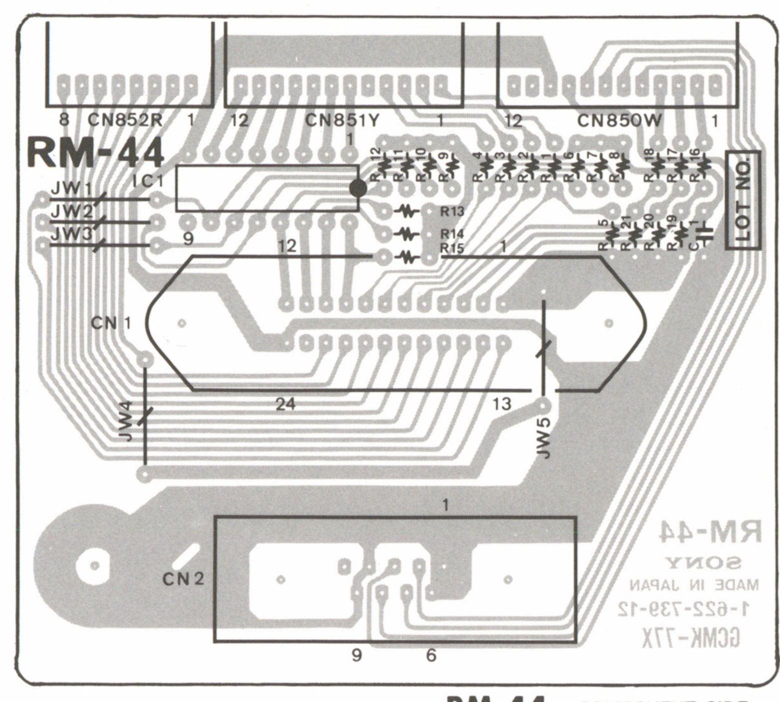
PTC-32 —COMPONENT SIDE—
1-622-638-11(1)
BVU-900

SW-290; TIME CODE CONTROL/SELECT SWITCH



SW-290 —COMPONENT SIDE—
1-626-680-11(1)
BVU-900

RM-44; REMOTE CONTROL (9PIN&24PIN)

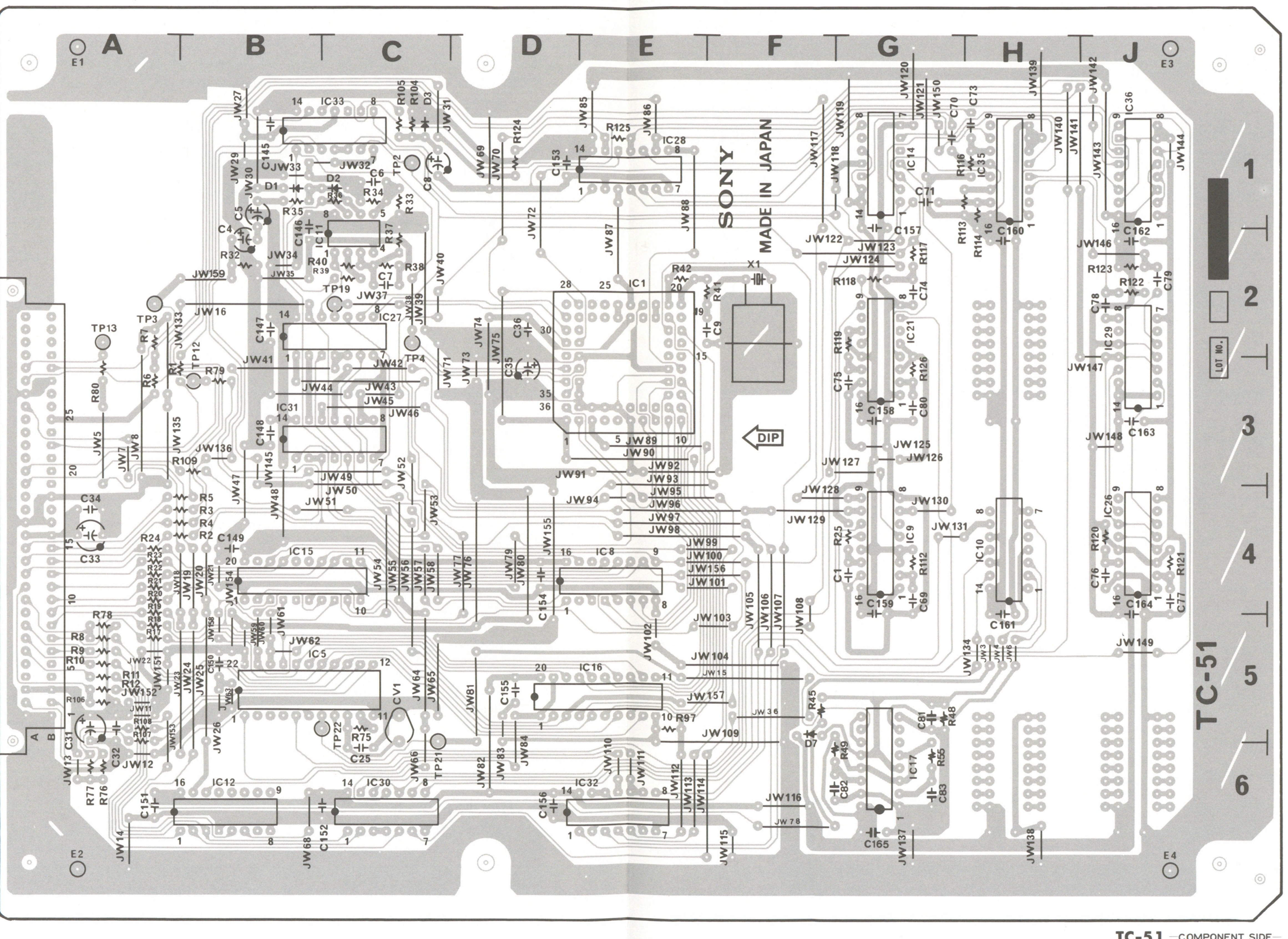


RM-44 —COMPONENT SIDE—
1-622-739-12(1)
BVU-900

TC-51; TIME CODE/CHARACTER GENERATOR

TC-51(1-626-683-11)

CV1	C-5
D1	B-1
D2	C-1
D3	C-1
D7	F-5
E1	A-1
E2	A-6
E3	J-1
E4	J-6
IC1	E-2
IC5	B-5
IC8	E-4
IC9	G-4
IC10	H-4
IC11	C-2
IC12	B-6
IC14	G-1
IC15	B-4
IC16	E-5
IC17	G-6
IC21	G-2
IC26	J-4
IC27	C-2
IC28	E-1
IC29	J-2
IC30	C-6
IC31	B-3
IC32	E-6
IC33	C-1
IC35	H-1
IC36	J-1
TP2	C-1
TP3	A-2
TP4	C-2
TP12	B-3
TP13	A-2
TP19	C-2
TP21	C-6
TP22	C-6
X1	F-2

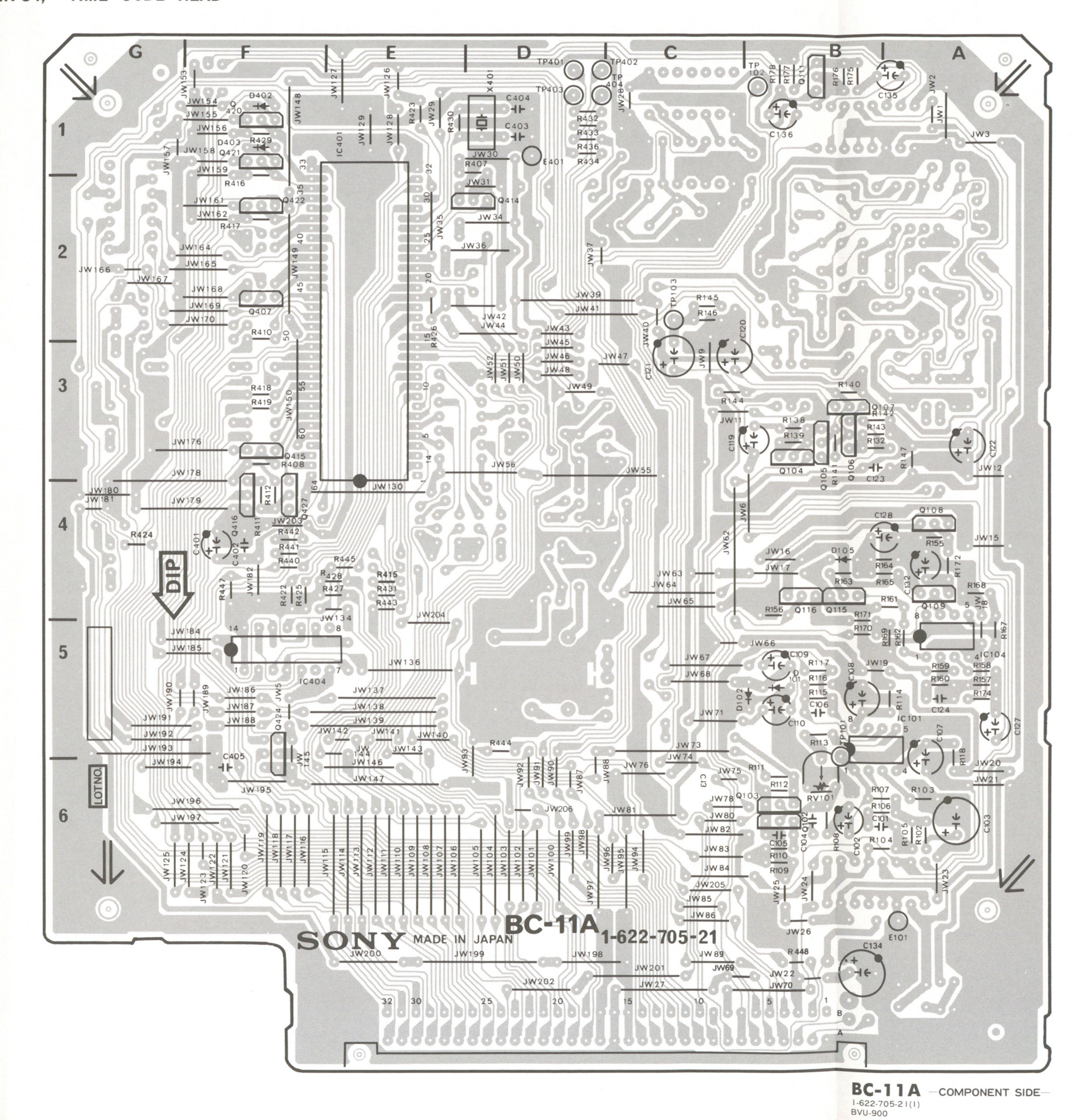


TC-51 —COMPONENT SIDE—
1-626-683-11(1)
BVU-900

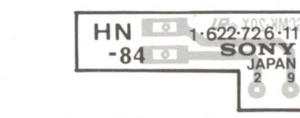
BC-11A; VIDEO/AUDIO TIMING CONTROL, TIME CODE PB AMPLIFIER
HN-84; TIME CODE HEAD

BC-11A(1-622-705-21)

D101	B-5
D102	C-5
D105	B-4
D402	F-1
D403	F-1
E101	A-6
E401	D-1
IC101	B-5
IC104	A-5
IC401	E-2
IC404	F-5
Q102	B-6
Q103	B-6
Q104	B-3
Q105	B-3
Q106	B-3
Q107	B-3
Q108	A-4
Q109	A-4
Q111	B-1
Q115	B-4
Q116	B-4
Q407	F-2
Q414	D-2
Q415	F-3
Q416	F-4
Q420	F-1
Q421	F-1
Q422	F-2
Q424	F-5
Q427	F-4
RV101	B-6
TP101	B-5
TP102	B-1
TP103	C-2
TP401	D-1
TP402	D-1
TP403	D-1
TP404	D-1
X401	D-1

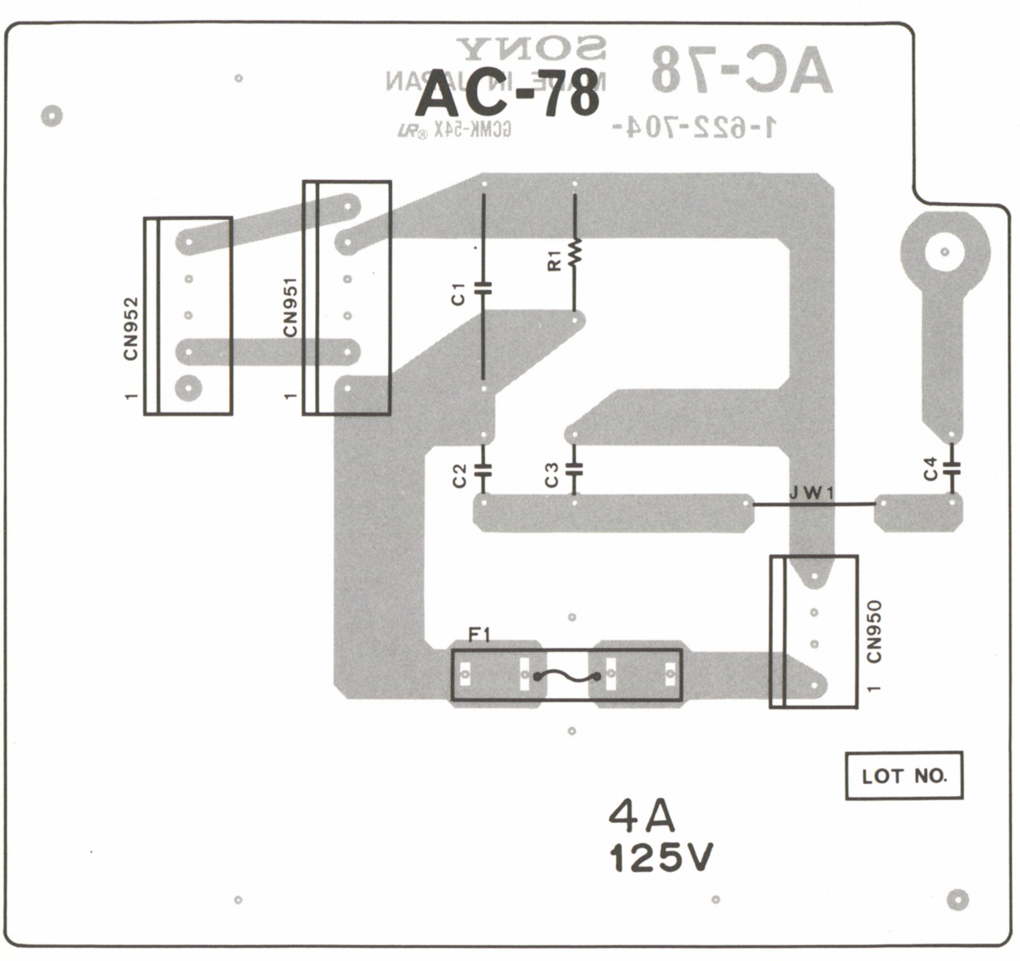


BC-11A —COMPONENT SIDE—
1-622-705-21(1)
BVU-900

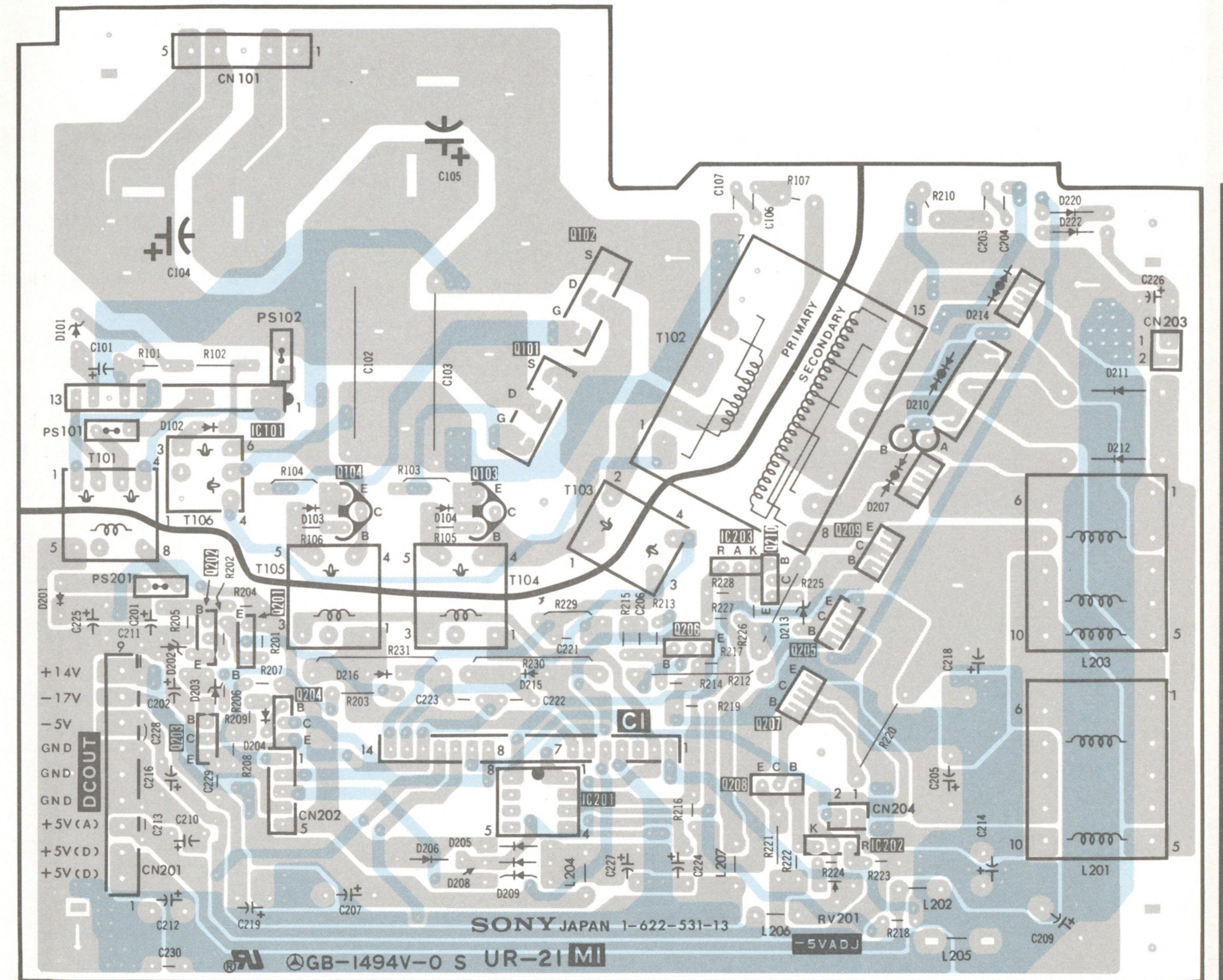


HN-84 —COMPONENT SIDE—
1-622-726-11(1)
BVU-900

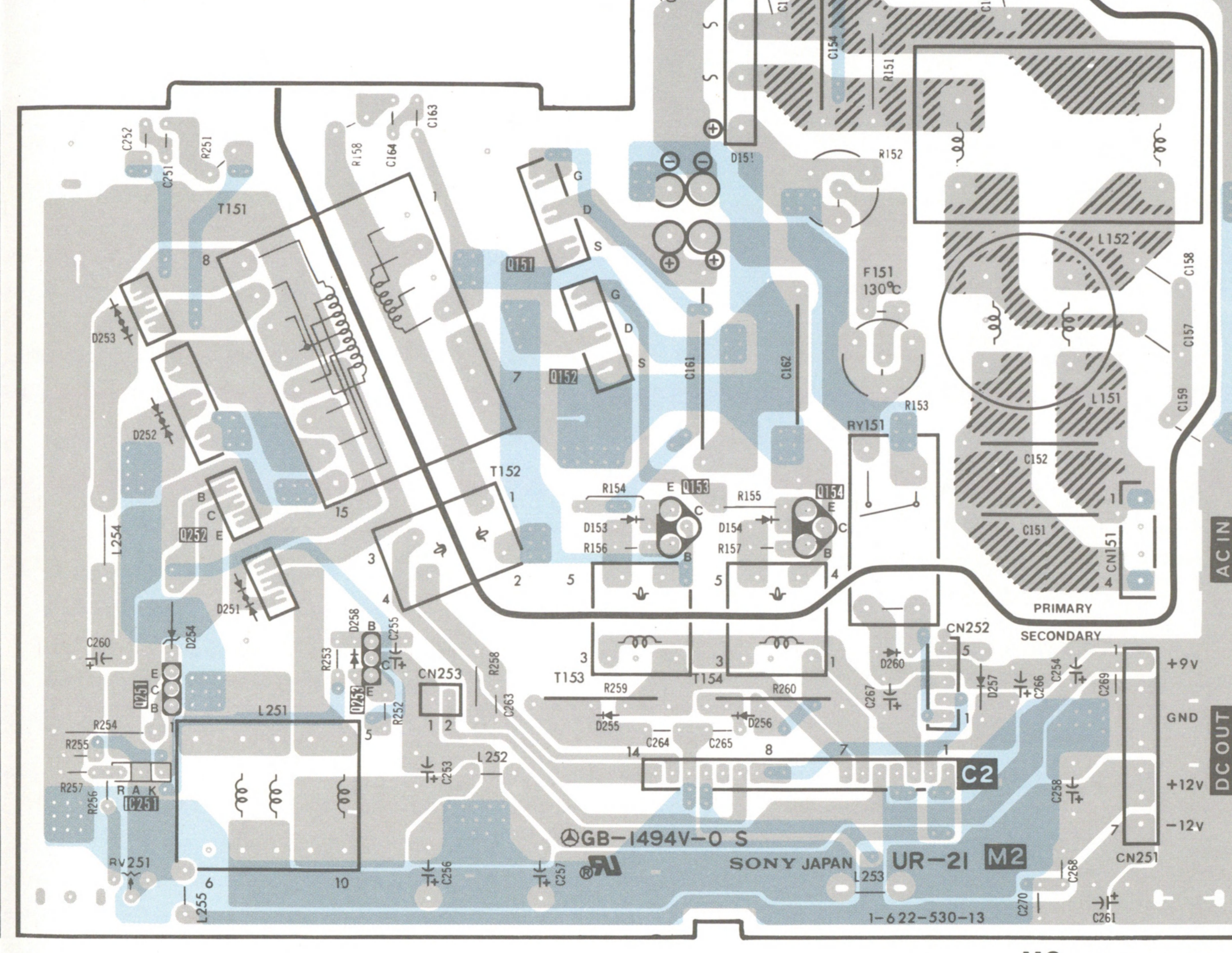
AC-78; AC PRIMARY CIRCUIT



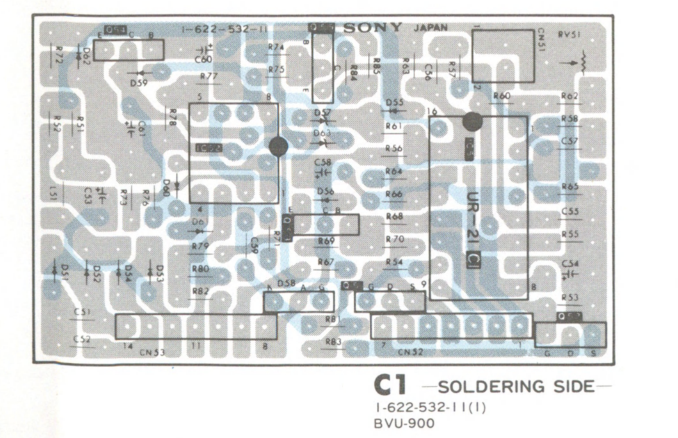
UR-21; SWITCHING REGULATOR
C1
C2
M1
M2



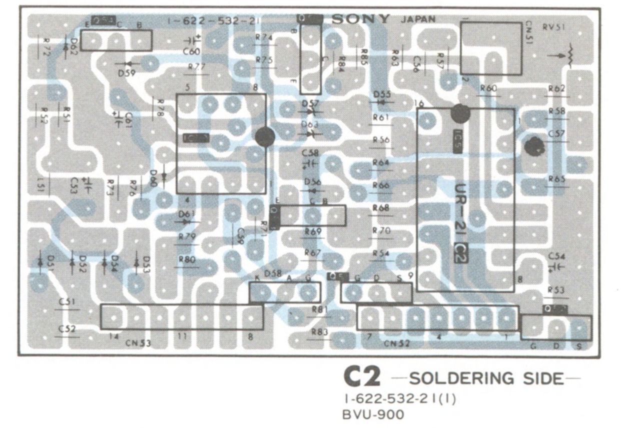
M1 –SOLDERING SIDE–
1-622-531-13(1)
BVU-900



M2 –SOLDERING SIDE–
1-622-531-13(1)
BVU-900



C1 –SOLDERING SIDE–
1-622-532-11(1)
BVU-900

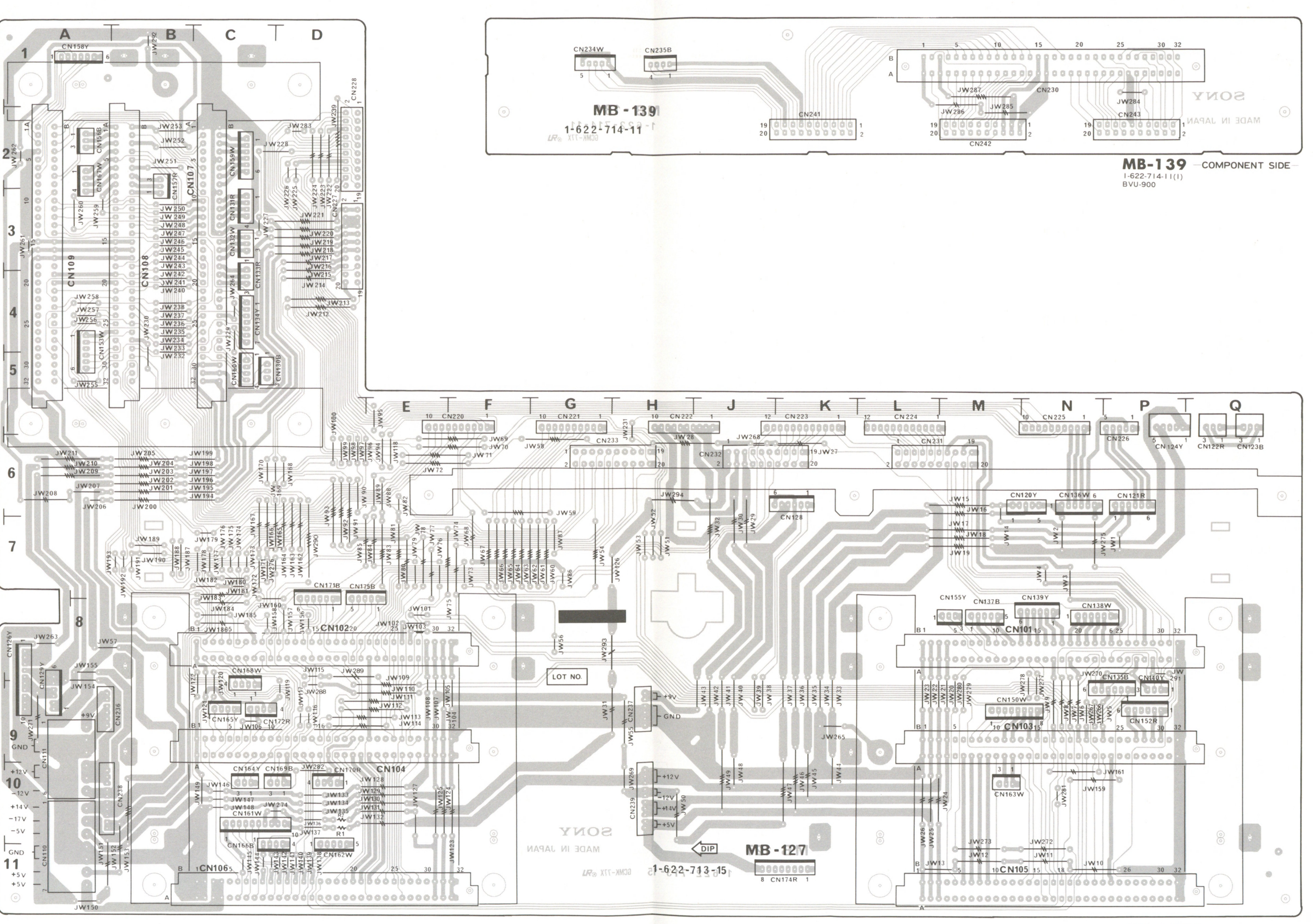


C2 –SOLDERING SIDE–
1-622-532-21(1)
BVU-900

MB-127A; MOTHER BOARD
MB-139; SUB MOTHER FOR TC

MB-127A(1-622-713-15)

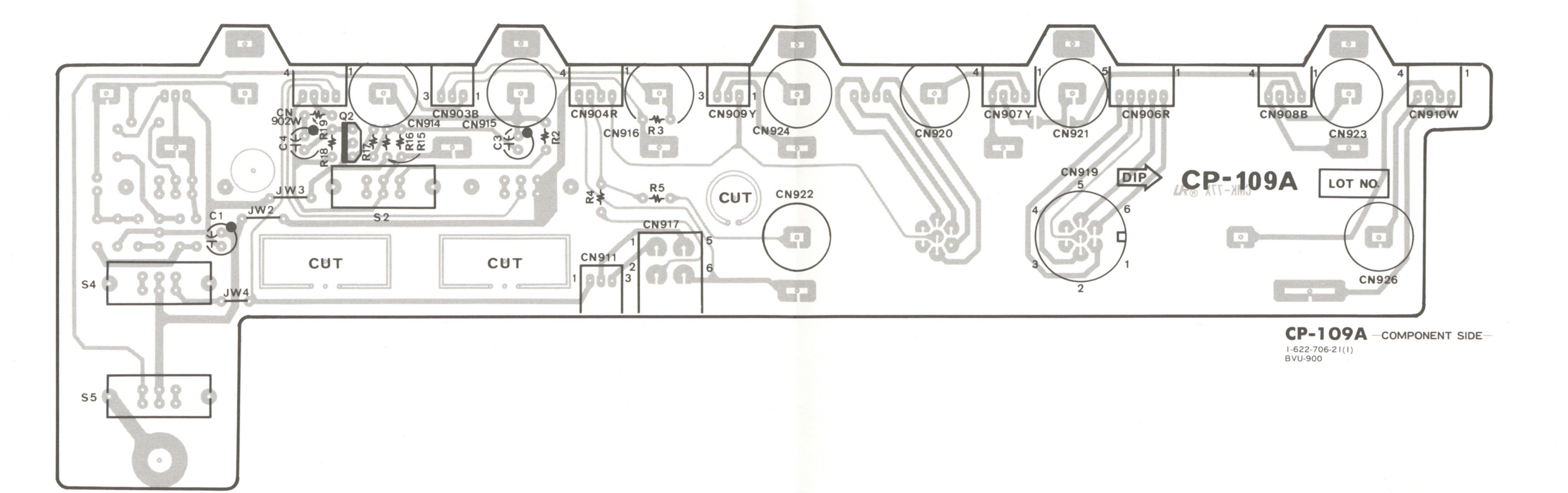
CN101	N-8	CN226	P-5
CN102	D-8	CN227	D-3
CN103	N-9	CN228	D-2
CN104	D-9	CN231	L-6
CN105	N-11	CN232	J-6
CN106	C-11	CN233	H-6
CN107	C-2	CN236	A-9
CN108	B-3	CN237	H-9
CN109	A-3	CN238	A-10
CN110	A-11	CN239	H-10
CN111	A-9		
CN120	N-6		
CN121	P-6		
CN122	Q-5		
CN123	Q-5		
CN124	P-5		
CN126	A-8		
CN128	K-6		
CN129	A-9		
CN130	C-5		
CN131	C-3		
CN132	C-3		
CN133	C-4		
CN134	C-4		
CN135	P-9		
CN136	N-6		
CN137	M-8		
CN138	N-8		
CN139	N-8		
CN140	P-9		
CN150	M-9		
CN152	P-9		
CN153	A-4		
CN155	M-8		
CN156	A-2		
CN157	B-2		
CN158	A-1		
CN159	C-2		
CN160	C-5		
CN161	C-10		
CN162	D-11		
CN163	M-10		
CN164	C-10		
CN165	C-9		
CN166	D-11		
CN167	A-2		
CN168	C-9		
CN169	D-10		
CN170	D-10		
CN171	D-7		
CN172	C-9		
CN174	K-11		
CN175	D-7		
CN220	F-5		
CN221	G-5		
CN222	H-5		
CN223	K-5		
CN224	L-5		
CN225	N-5		



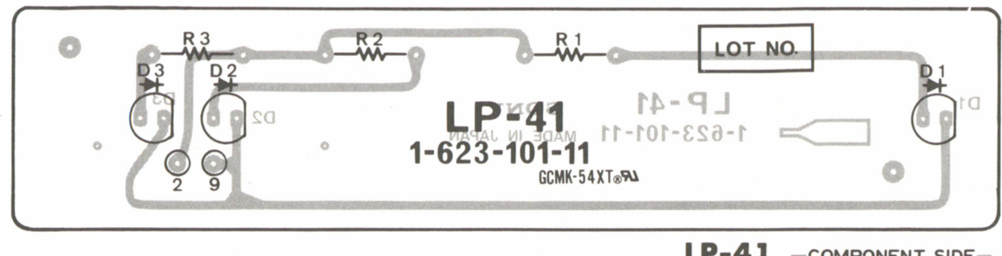
MB-139 —COMPONENT SIDE—
1-622-714-11(1)
BVU-900

MB-127A —COMPONENT SIDE—
1-622-713-15(1)
BVU-900

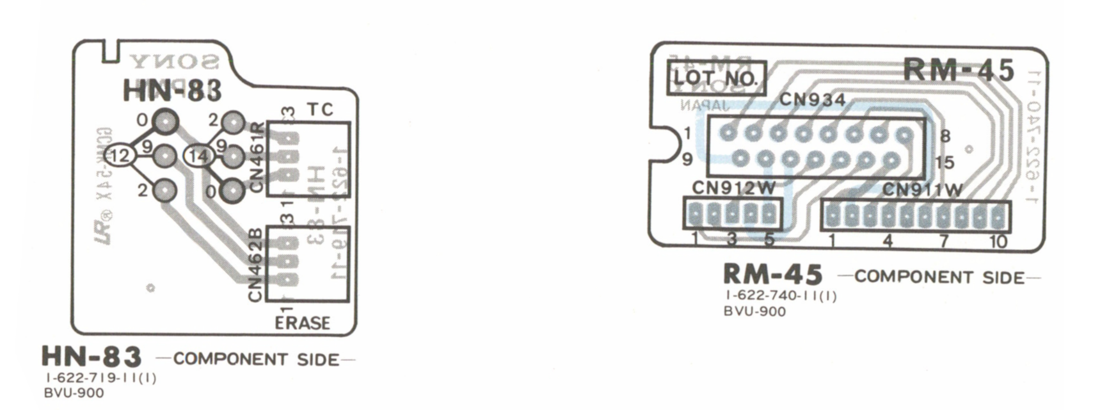
CP-109A; CONNECTOR PANEL



HN-83; RELAY BOARD FOR TIME CODE HEAD
LP-41; CASSETE COMPARTMENT LIGHT
RM-45; TBC REMOTE CONTROL



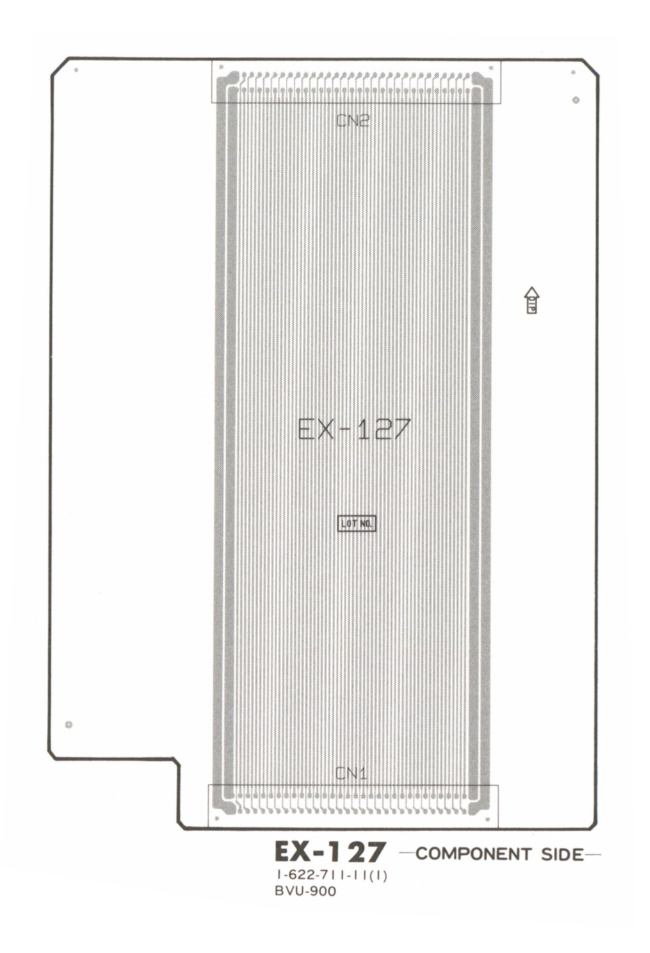
LP-41 —COMPONENT SIDE—
1-623-101-11(1)
BVU-900



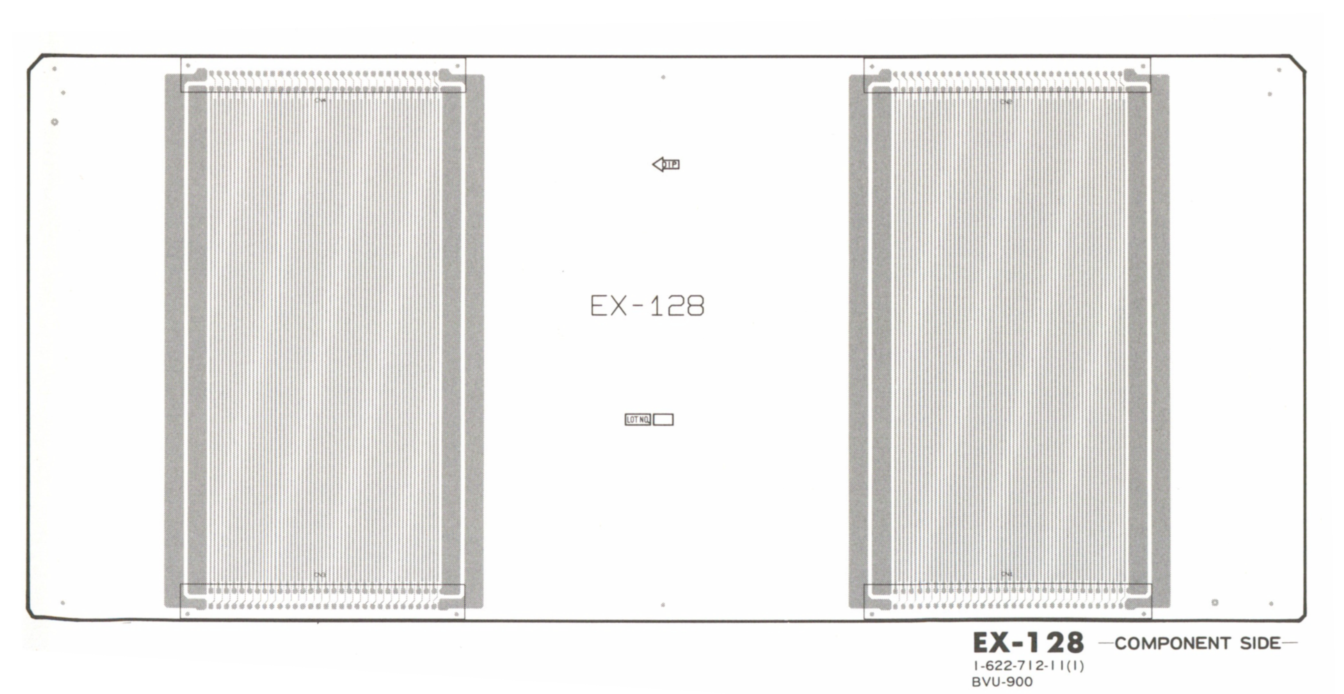
HN-83 —COMPONENT SIDE—
1-622-719-11(1)
BVU-900

RM-45 —COMPONENT SIDE—
1-622-740-11(1)
BVU-900

EX-127; EXTENSION BOARD FOR AUDIO/TIME CODE
EX-128; EXTENSION BOARD FOR VIDEO/SERVO/TBC



EX-127 —COMPONENT SIDE—
1-622-711-11(1)
BVU-900



EX-128 —COMPONENT SIDE—
1-622-712-11(1)
BVU-900

SECTION 18
SPARE PARTS AND FIXTURE

18-1. PARTS INFORMATION

(1) The shaded and ⚠ -marked components are critical to safety. Replace only with same components as specified.

(2) Replacement Parts supplied from the Sony Parts Center will sometimes have a different shape from the original parts. This is due to "improved parts and/or engineering changes" or "standardization of genuine parts".
This manual's exploded views and electrical spare parts list indicate the part numbers of "the standardized genuine parts at the present". Regarding engineering part changes by the engineering department, refer to Sony service bulletins and service manual supplements.

(3) The parts marked with "s" in the SP column of the exploded views and electrical spare parts lists are normally stocked for replacement purposes. The parts marked with "o" in the SP column are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.

(4) Items with no part number and/or no description are not stocked because they are seldom required for routine service.

(5) (T) after a spring description is shown on the exploded views in order to indicate the number of spring turns required for the use. (Example)
Spring, tension (24T); This spring must be cut at its 24th turn for actual use.



18-2. EXPLODED VIEW

. Exploded vews are composed of the following blocks.



(1) Reel Chassis
supply reel table
take-up reel table
supply main brake
take-up main brake
sub brake
take-up tension detector
TRC detector
reel motors
reel table rotaiton detector

(2) Threading Ring Block
threading ring
gear box
T correction guide
tape beginning sensor
FR detector

(3) Thrading Arm
T drawer arm
S drawer arm
S drawer roller
drawer lever

(4) Drum and Capstan Blocks
head drum
capstan motor
audio/ CTL head
tape guides

(5) EN Base Block
Time Code Head
S guard
supply tension detector

(6) Pinch Lever and Pinch Solenoid Blocks
pinch lever
pinch roller pre-set cam
pinch solenoid

(7) Cassette-up Compartment Block

(8) Function Control
function control board
search dial

(9) Level Control
level control board
level meter
power sw

(10) Chassis Block (Rear)
printed circuit boards

(11) Chassis Block (Left)
printed circuit boards
left side panel

(12) Chassis Block (Right)
printed circuit boards

(13) Chassis Block (Bottom)
printed circuit boards

(14) Chassis Block (Front)
TBC control board
cassette-up compartment stay

(15) Connector Panel

(16) Rear Panel
fan motor
AC inlet
remote connector

(17) Switching Regulator

(18) Ornamental Panel (1)
function control panel
search dial

(19) Ornamental Panel (2)
level control panel

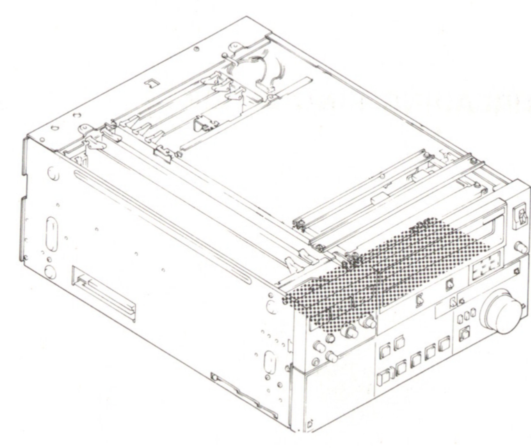
(20) Ornamental Panel (3)
U case
bottom plate

1. REEL CHASSIS

take-up main brake

sub brake

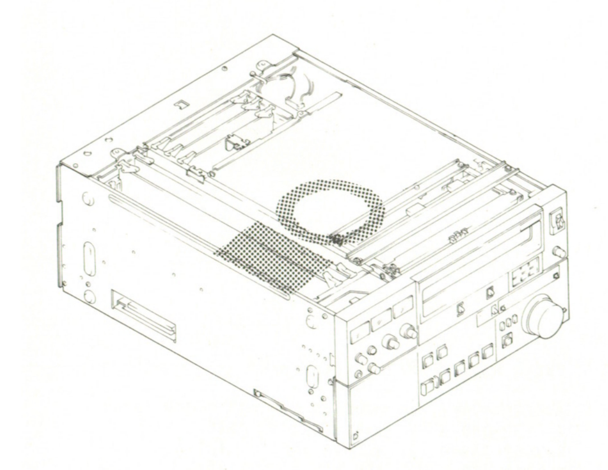
supply main brake



No.	Parts No.	SP	Description
1	A-6729-496-A	o	MOUNTED CIRCUIT BOARD,SE-48
2	A-6739-080-A	s	TABLE ASS'Y, REEL
3	X-3668-749-0	s	HOLDER ASS'Y, LINING
4	X-3718-628-1	o	ARM ASS'Y, SUB BRAKE
5	X-3718-629-1	o	RINK ASS'Y, BRAKE RELEASE
6	X-3718-630-1	s	ARM ASSY, T SENSOR
7	X-3718-641-1	s	LINING ASS'Y
⚠8	1-454-417-31	s	SOLENOID, PLUNGER
9	1-622-260-11	o	RINTED CIRCUIT BOARD, PTC-30
10	1-622-715-11	o	RINTED CIRCUIT BOARD, DUS-177
11	1-622-716-11	o	RINTED CIRCUIT BOARD, DUS-178
12	1-622-717-11	o	RINTED CIRCUIT BOARD, LE-54
13	1-622-718-11	o	RINTED CIRCUIT BOARD, PTC-29
14	1-806-232-21	s	DETECTOR MB-1102/S.N
15	2-083-308-00	s	SPRING, (B)
16	3-307-932-00	s	SPRING, COMPRESSION
17	3-535-369-XX	s	SPRING, TENSION (12T)
18	3-548-124-00	s	SPRING, TENSION
19	3-630-035-11	s	SPACER, REEL MOTOR (0.02T)
20	3-650-512-00	s	COLLAR, (A)
21	3-651-203-11	s	SPACER, REEL MOTOR (0.05T)
22	3-651-203-21	s	SPACER, REEL MOTOR (0.1T)
23	3-668-031-00	o	RETAINER (UPPER), CASSETTE
24	3-668-966-00	s	SPRING
25	3-701-506-01	s	SET SCREW, DOUBLE POINT 3X4
26	3-718-307-01	s	ACTUATOR, TRC
27	3-718-342-01	o	TRC BOX (UPPER)
28	3-718-343-01	o	TRC BOX (LOWER)
29	3-718-629-01	o	SPRING (1), LEAF, T
30	3-718-630-03	o	SPRING (2), LEAF, T
31	3-718-660-01	o	RETAINER (TF), CASSETTE
32	3-718-673-01	o	SUSPENDER, BS
33	3-718-686-01	o	STAND, B
34	3-718-700-01	o	HOLDER, DME
35	3-718-712-01	o	ARM, BRAKE
36	3-718-713-01	o	ARM, BRAKE RELEASE
37	3-718-741-01	s	HOLDER, T-CDS
38	3-718-764-01	o	RINK (A), BRAKE RELEASE
39	3-718-766-01	o	ARM, DRIVING
40	3-718-767-01	o	SCALE, POWER
41	3-718-770-01	o	BASE, T SPRING
42	3-718-795-01	o	BAND,M
43	3-718-796-01	o	HOLDER, M PC BOARD
44	4-858-779-00	s	SPRING, COMPRESSION
45	8-719-930-20	s	DIODE HLMP-1302
46	8-835-255-01	s	MOTOR, DC R432278181A

 THREADING RING BLOCK

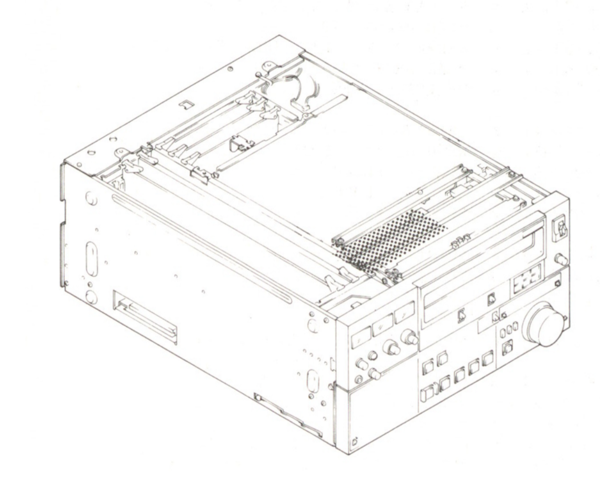
2. THREADING RING BLOCK



No.	Parts No.	SP	Description
101	A-6750-222-A	s	RING BLOCK ASS'Y, MAIN
102	A-6750-223-A	s	PINCH ROLLER BLOCK ASS'Y
103	A-6750-224-A	s	BOX BLOCK ASS'Y, GEAR
104	X-3668-719-0	o	ROLLER ASS'Y, RING
105	X-3668-721-0	o	CHASSIS ASS'Y, GUIDE
106	X-3668-722-0	s	LOCKER ASS'Y, FR
107	X-3668-723-2	o	ARM ASS'Y, GUIDE, T CORRECTION
108	X-3668-743-0	s	PULLY ASS'Y, WORM
109	X-3672-704-1	o	BRACKET ASS'Y, MOTOR
110	X-3672-718-2	s	SHAFT ASS'Y, GUIDE
111	X-3718-602-1	s	ROLLER ASS'Y, GUIDE PRECEDING
112	X-3718-604-1	o	RING (UPPER) ASS'Y, SUB
113	X-3718-605-1	o	RING (LOWER) ASS'Y, SUB
114	X-3718-606-1	o	BASE ASS'Y, PRECEDING
115	X-3718-607-1	s	SHAFT ASS'Y, RG
116	X-3718-614-1	s	GUIDE ASS'Y, TAPE
117	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5
118	1-618-600-11	o	PRINTED CIRCUIT BOARD, LM-13
119	1-622-258-11	o	PRINTED CIRCUIT BOARD, PTC-33
120	3-143-067-00	s	SPRING, TENSION
121	3-437-289-00	s	SPRING, TENSION
122	3-634-196-00	s	SPRING
123	3-668-743-00	o	NUT, PLATE, ROLLER, PRECEDING
124	3-668-745-00	s	SPRING
125	3-668-749-02	o	ARM (A), GUIDE, T CORRCTION
126	3-668-753-00	o	PLATE, ADJUSTMENT, FR, LOCKER
127	3-668-754-00	o	SHAFT, GUIDE ARM, T CORRECTION
128	3-668-755-00	o	PLATE, STOPPER, SR
131	3-668-900-00	o	BRACKET, T SENSOR
132	3-668-901-00	o	HOLDER, T PHOTO
133	3-668-947-00	s	PINION, L
134	3-668-948-00	o	SHAFT, WORM
135	3-668-963-00	s	ROLLER, RING
136	3-669-960-00	o	RETAINER, SHAFT
137	3-672-736-01	s	PULLEY, LM
138	3-672-737-01	s	BELT, SQUARE
139	3-672-738-01	o	PLATE, GROUND, SLED
140	3-672-739-01	o	BELT, LM SHIELD
141	3-672-790-01	o	BRACKET, FR DETECTION
142	3-701-437-11	s	WASHER, POLY 2 MM DIA., 0.25T
143	3-701-437-21	s	WASHER, POLY 2 MM DIA., 0.5T
144	3-701-439-21	s	WASHER, POLY 2 MM DIA., 0.5T
145	3-701-506-01	s	SET SCREW, DOUBLE POINT 3X4
146	3-703-074-00	s	CAP 3, SHAFT
147	3-703-075-00	s	CAP 2, SHAFT
148	3-718-633-01	s	FLANGE, UPPER, PRECEDING GUIDE
149	3-718-634-01	s	FLANGE, LOWER, PRECEDING GUIDE
150	3-838-774-00	o	SPRING
151	1-541-376-11	s	MOTOR, DC (DNR-4700A)

THREADING ARM

3. THREADING ARM



205 204 E3 PWH3×6 223 217 210 227 B3×10 213 B3×4 212 SET SCREW 2.6×3 (FLAT POINT) B3×6 216 PSW3×8 222 214 SET SCREW 3×5 (FLAT POINT) 203 211 T drawer arm

drawer lever PWH3×6 207 208 201 228 W2 229 202 225 226 SET SCREW3×4 (FLAT POINT) 219 S drawer roller

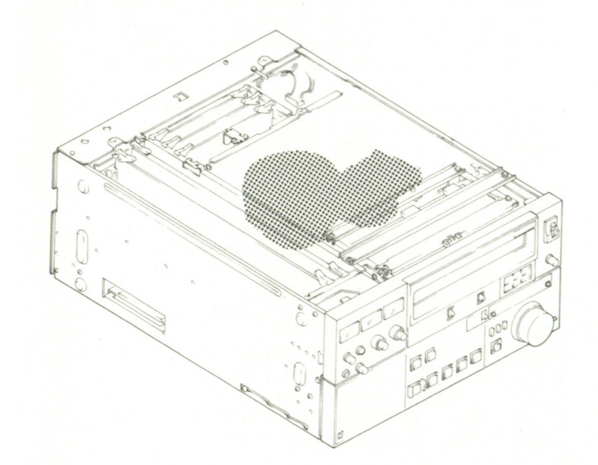
227 221 E3 PWH 3×6 215 PWH3×6 218 220 206 PWH3×6 209 S drawer arm 224 PSW3×6

No.	Parts No.	SP	Description
201	A-6746-025-A	s	ROLLER BLOCK ASS'Y (1), S DRAWER
202	A-6746-050-C	s	ROLLER BLOCK ASS'Y, DRAWER, S
203	A-6746-051-A	s	ROLLER BLOCK ASS'Y, GUIDE, T
204	A-6750-202-A	o	LEVER BLOCK ASS'Y, DRAWER
205	A-6750-221-A	o	ARM BLOCK ASS'Y, DRAWER, T
206	A-6750-225-A	o	ARM BLOCK ASS'Y, DRAWER, S
207	X-3668-713-0	o	LINK (B) ASS'Y, DRIVING
208	X-3668-729-0	s	LEVER ASS'Y, DRAWER
209	X-3672-706-1	o	BASE ASS'Y, S DRAWER ARM
210	X-3672-708-1	o	ARM ASS'Y, T DRAWER
211	X-3718-305-1	o	RETAINER ASS'Y, ARM, T DRAWER
212	X-3718-603-1	s	ROLLER ASS'Y, GUIDE, RG
213	X-3718-610-1	s	SHAFT ASS'Y, DRAWER GUIDE
214	X-3718-612-1	o	GUIDE ASS'Y, T
215	X-3718-615-1	o	ARM ASS'Y, DRAWER, S
216	1-622-259-11	o	PRINTED CIRCUIT BOARD, PTC-34
217	3-534-854-00	s	SPRING, COMPRESSION
218	3-540-506-00	s	SPRING, TENSION
219	3-668-718-00	s	RETAINER, SPRING, S DRAWER
220	3-668-720-00	o	LIMITER, S DRAWER
221	3-668-721-00	s	ARM, S DRIVING
222	3-668-734-00	o	SPRING
223	3-668-735-00	s	RETAINER, SPRING
224	3-668-760-00	o	SHAFT, DRAWER LEVER
225	3-669-946-00	s	RING (P4), O
226	3-669-974-00	s	HOLDEER (L), S GUIDE
227	3-703-074-00	s	CAP 3, SHAFT
228	3-718-701-02	s	HOLDER (M), S GUIDE
229	3-718-773-01	s	SPRING, COMPRESSION

BVU-900(1)

 DRUM AND CAPSTAN BLOCKS

4. DRUM AND CAPSTAN BLOCKS



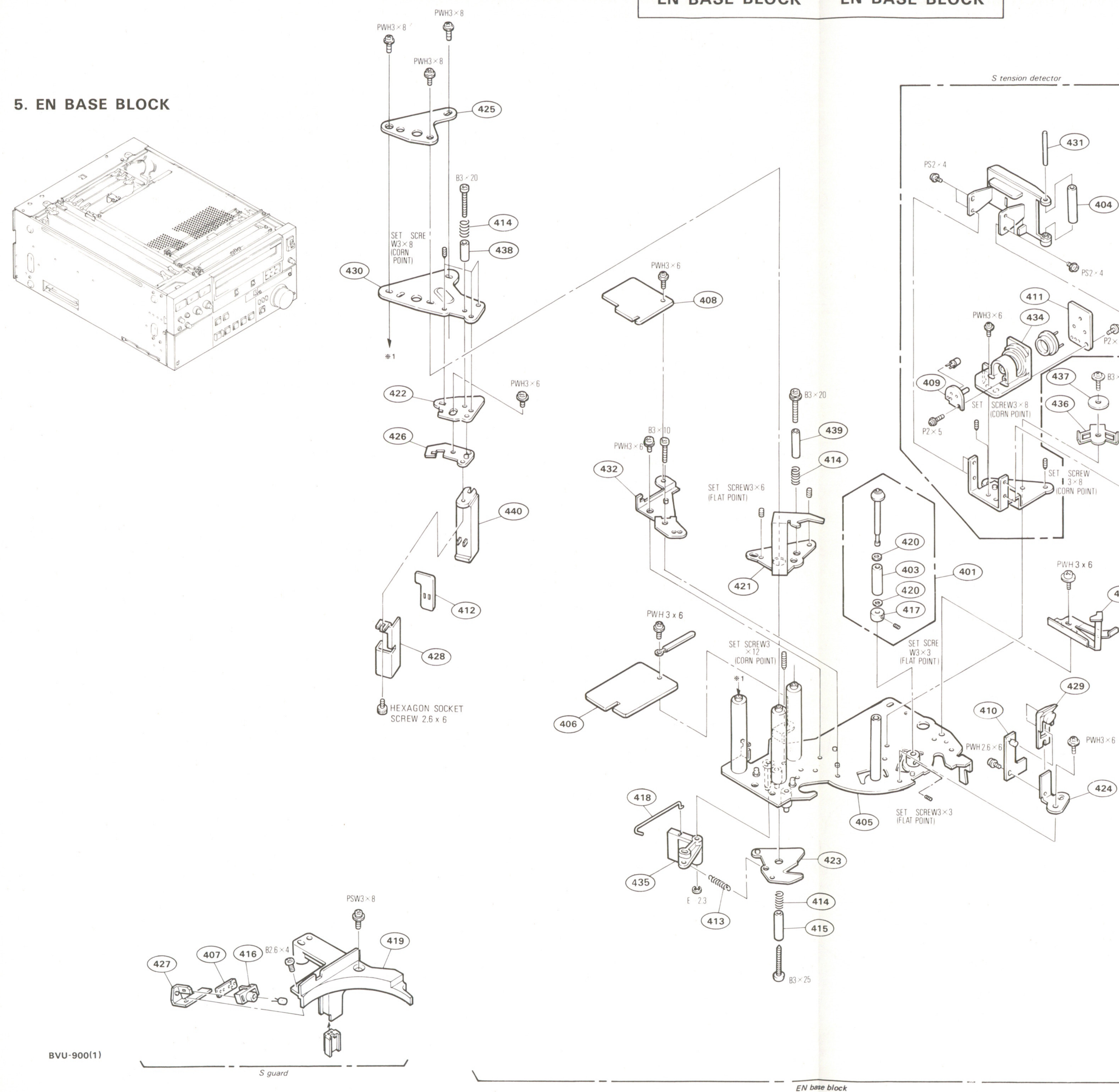
head drum

audio/CTL head

BVU-900(1)

No.	Parts No.	SP	Description
301	A-6746-054-A	s	ROLLER ASS'Y, GUIDE, TAPE
302	A-6736-085-A	o	HEAD BLOCK ASS'Y, AUDIO
303	A-6709-636-A	s	UPPER DRUM ASS'Y, DUR-45-R
304	A-6709-634-A	s	HEAD DRUM ASS'Y, DUH-45A-R
305	1-586-633-00	s	DETECTOR, DEW
306	1-615-924-11	o	PRINTED CIRCUIT BOARD, DUS-92
307	3-534-329-11	s	WASHER, TAPE GUIDE
308	3-630-029-01	s	SPACER, FLANGE (0.01T)
309	3-630-029-11	s	SPACER, FLANGE (0.02T)
310	3-630-029-21	s	SPACER, FLANGE (0.05T)
311	3-630-029-31	s	SPACER, FLANGE (0.1T)
312	3-630-029-41	s	SPACER, FLANGE (0.03T)
313	3-641-612-00	s	GUIDE, TAPE
314	3-641-615-00	s	SPRING, COMPRESSION
315	3-641-616-00	s	NUT, TAPE GUIDE ADJUSTMENT
316	3-641-621-00	o	SCREW, HEAD ADJUSTMENT
317	3-641-622-00	s	SPRING, COMPRESSION
318	3-645-076-00	o	WASHER, M-REEL S
319	3-647-815-00	o	PLATE, ADJUSTMENT, CTL HEAD
320	3-647-816-00	o	POLE, SUPPORT, CTL BRACKET
321	3-655-631-00	o	TERMINAL, GROUND
322	3-655-675-02	o	CASE (F), AU
323	3-655-676-01	o	BRACKET (A), CTL HEAD
324	3-655-677-01	o	BRACKET (B), CTL HEAD
325	3-655-678-03	o	CASE (B), AU
326	3-672-978-02	s	GUIDE (B), TAPE
327	3-672-762-01	o	PIN, DRUM
328	3-672-763-01	o	CAM, P OFFSET PREVENTION
329	3-672-731-01	s	TG-4
330	3-688-807-01	s	FLANGE, TAPE GUIDE
331	3-703-467-00	s	SCREW
332	3-718-758-01	s	DAMPER, AIR
333	8-825-772-81	s	HEAD, AC (PS264-5803A)
334	8-835-258-01	s	MOTOR, DC BHF-1915B

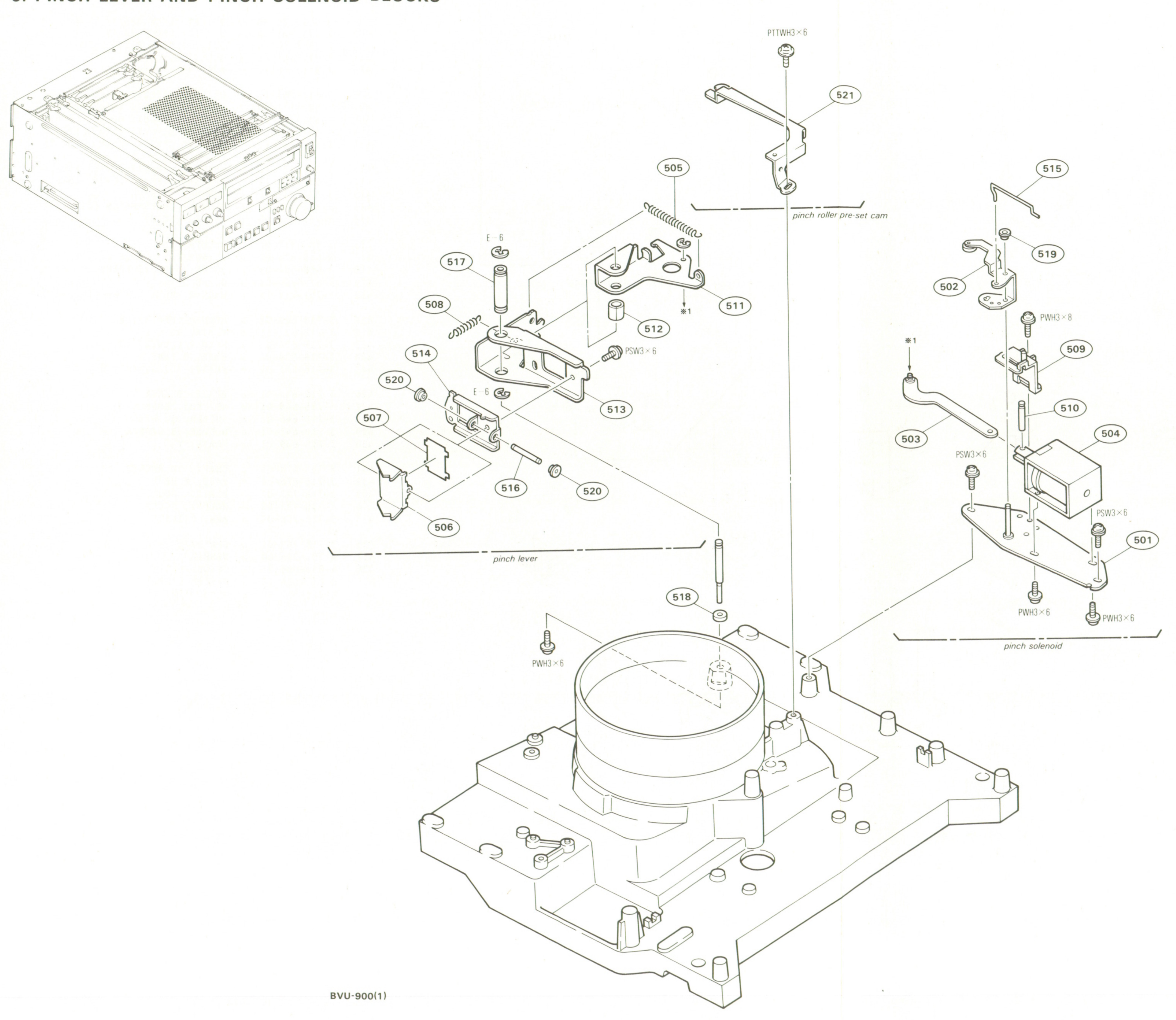
5. EN BASE BLOCK



No.	Parts No.	SP	Description
401	A-6046-063-A	s	ROLLER BLOCK ASS'Y, G
402	A-6742-063-A	s	S-T (D) BLOCK ASS'Y
403	X-3668-727-0	o	GUIDE ASS'Y, TAPE
404	X-3718-611-1	s	ROLLER ASS'Y, TD
405	X-3718-621-2	o	BASE ASS'Y, EN
406	1-622-261-11	o	PRINTED CIRCUIT BOARD, DUS-47
407	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5
408	1-622-719-11	o	PRINTED CIRCUIT BOARD, HN-83
409	1-622-720-11	o	PRINTED CIRCUIT BOARD, LE-53
410	1-622-721-11	o	PRINTED CIRCUIT BOARD, PTC-26
411	1-622-722-11	o	PRINTED CIRCUIT BOARD, PTC-28
412	1-622-726-11	o	PRINTED CIRCUIT BOARD, HN-84
413	3-535-531-00	s	SPRING, TEISION
414	3-637-335-00	s	SPRING, COMPRESSION (C)
415	3-657-086-00	o	SPACER (3X20)
416	3-668-837-00	o	HOLDER, LED
417	3-668-874-00	s	FLANGE (1), LOWER
418	3-668-884-03	o	JOINT, RESERVE PRESS
419	3-672-764-03	s	GUARD,S
420	3-701-438-11	s	WASHER, POLY 2.5 MM DIA., 0.25T
421	3-718-622-01	s	HOLDER (UPPER), S
422	3-718-623-01	o	PLATE, TC
423	3-718-624-01	s	HOLDER (LOWER), S
424	3-718-639-01	o	BASE, S SENSOR
425	3-718-641-01	o	PLATE, ADJUSTMENT, Y
426	3-718-644-01	o	PLATE, BLANCE
427	3-718-645-01	o	BRACKET, HOLDER
428	3-718-646-01	o	SHIELD, TC HEAD
429	3-718-647-01	o	HOLDER, S SENSOR
430	3-718-649-01	o	PLATE, Y
431	3-718-674-01	o	SHAFT, TD ROLLER
432	3-718-676-01	o	BASE, E HEAD
433	3-718-722-01	o	PLATE, GROUND
434	3-718-723-02	o	HOLDER, S-CDS
435	3-718-766-01	o	ARM, DRIVING
436	3-718-769-01	o	SPRING
437	4-302-315-00	o	WASHER
438	4-855-006-01	s	SPACER (3X12)
439	4-855-006-11	s	SPACER (3X14)
440	8-825-771-31	s	HEAD, TIME CODE, PP295-58

PINCH LEVER AND PINCH SOLENOID BLOCKS

6. PINCH LEVER AND PINCH SOLENOID BLOCKS



BVU-900(1)

No.	Parts No.	SP	Description
501	X-3668-734-0	o	BASE ASS'Y, PINCH PRESS
502	X-3668-735-3	s	LEVER ASS'Y, RESERVE PRESS
503	X-3668-736-0	o	JOINT ASS'Y
⚠504	1-454-416-31	s	SOLENOID, PLUNGER
505	3-610-265-02	s	SPRING
506	3-642-518-00	o	LEVER, PINCH
507	3-642-519-00	o	SPRING
508	3-645-392-00	s	SPRING, TENSION
509	3-668-863-00	s	GUIDE, ARBOR
510	3-668-864-00	s	PIN, SOLENOID
511	3-668-865-00	o	LEVER (B), PINCH PRESS
512	3-668-867-00	o	SPACER (8X9)
513	3-668-868-00	o	LEVER (A), PINCH PRESS
514	3-668-883-00	o	PLATE, ADJUSTMENT, PINCH PRESS
515	3-668-884-03	o	JOINT, RESERVE PRESS
516	3-668-895-00	o	SHAFT
517	3-668-896-00	o	SLEEVE, PRESS LEVER, PINCH
518	3-672-733-01	o	TABLE SHAFT, PRESS LEVER
519	3-703-074-00	s	CAP 3, SHAFT
520	3-703-075-00	s	CAP 2, SHAFT
521	3-718-777-02	o	DECK, RESERVE PRESS

CASSETTE-UP COMPARTMENT BLOCK

7. CASSETTE-UP COMPARTMENT BLOCK

No.	Parts No.	SP	Description
601	A-6751-367-A	s	CASSETTE-UP BLOCK ASS'Y
602	X-3668-057-0	s	RACK ASS'Y, CASSETTE COMPERTMENT
603	X-3668-058-0	s	RACK ASS'Y, CASSETTE COMPERTMENT
604	X-3668-059-0	s	ARM ASS'Y, SWITCH, DOWN
605	X-3668-060-3	o	HOLDER ASS'Y, ARM
606	X-3668-061-0	o	RUPPORT ASS'Y, LID
607	1-622-255-11	o	PRINTED CIRCUIT BOARD, CC-31
608	1-622-256-11	o	PRINTED CIRCUIT BOARD, CC-32
609	1-622-257-11	o	PRINTED CIRCUIT BOARD, CC-33
610	1-623-101-11	o	PRINTED CIRCUIT BOARD, LP-41
611	3-507-051-00	s	SPRING, TENSION
612	3-534-217-11	s	SPRING, TENSION
613	3-536-780-11	s	SPRING, TENSION
614	3-653-387-00	s	BELT, LM
615	3-668-295-00	o	LEVER (RIGHT), CASSETTE PUSH-OUT
616	3-668-296-00	o	LEVER (LEFT), CASSETTE PUSH-OUT
617	3-668-297-00	s	RETAINER, CASSETTE
618	3-668-298-00	o	SPRING
619	3-668-299-00	s	ROLLER, GUIDE
620	3-668-300-00	o	CAM, LID OPEN
621	3-668-301-00	o	SHAFT, DRIVING
622	3-668-303-00	s	GEAR (A)
623	3-668-304-00	s	GEAR (B)
624	3-668-305-00	s	GEAR (C)
625	3-668-306-00	s	GEAR (D)
626	3-668-307-02	o	JOINT (R), LEFT & RIGHT
627	3-668-309-00	o	BRACKET, SWITCH
628	3-668-310-02	o	ARM, LID OPEN
629	3-668-313-02	s	FRAME, SUPPORT, REFLECTOR
630	3-668-315-02	s	GEAR, LID
631	3-668-371-11	s	LID, CASSEETTE
632	3-668-474-00	s	BEARING (6)
633	3-672-604-11	s	REFLECTOR
634	3-672-639-03	s	BRACKET, LAMP
635	3-672-750-01	s	PULLEY (C), MOTOR
636	3-718-374-01	o	JOINT (F), LEFT & RIGHT
637	3-718-373-01	o	RETAINER, LID
638	3-701-439-21	s	WASHER, POLY 3 MM DIA., 0.5T
639	8-835-179-01	s	MOTOR, DC MCB2B15

cassette-up compertment

601

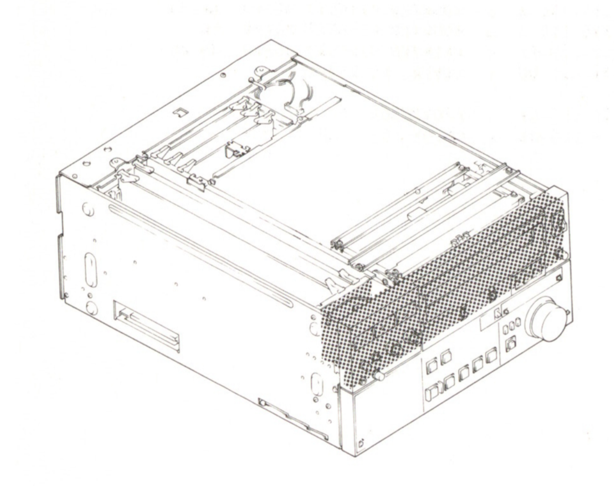
8. FUNCTION CONTROL



BVU-900(1)

No.	Parts No.	SP	Description
701	A-6717-496-A	o	MOUNTED CIRCUIT BOARD, KY-144A
702	A-6734-238-B	s	DIAL BLOCK ASS'Y, SEARCH
703	X-3717-226-1	o	SHAFT SUB ASS'Y, MAIN
704	X-3717-227-1	o	ARM (RIGHT), ASS'Y, S10
705	X-3717-228-1	o	ARM (LEFT), ASS'Y, S10
706	X-3717-229-1	o	ARM ASS'Y, RETURN
708	1-516-995-00	s	SWICH, LEVER SLIDE
709	1-552-539-00	s	SWICH, KEY BOARD
710	1-571-167-11	s	SWITCH, TACTIL
711	1-571-167-21	s	SWITCH, TACTIL
712	1-571-167-31	s	SWITCH, TACTIL
713	1-571-167-41	s	SWITCH, TACTIL
714	1-571-169-11	s	SWITCH, TACTIL
715	1-571-169-21	s	SWITCH, TACTIL
716	1-622-638-11	o	PRINTED CIRCUIT BOARD, PTC-32
717	2-280-622-11	o	SUPPORT (M3), HEXAGON
718	3-531-576-01	s	RIVET, NYLON
719	3-639-371-00	s	SPRING, TENSION
720	3-659-487-00	s	HOLDER, BUZER
721	3-659-488-00	s	PIN, BUZER HOLDER
722	3-662-048-00	s	WASHER, BRACKET
723	3-701-443-21	s	WASHER, POLY 5 MM DIA., 0.5T
724	3-717-315-01	o	PLATE, BOTTOM, SD
725	3-717-316-02	o	GUIDE, LOCK IN
726	3-717-317-01	o	PLATE, CLUCH
727	3-717-318-01	o	BEARING, S10
728	3-717-319-01	o	SPRING, TORSION
729	3-717-320-01	o	SPRING, COMPRESSION
730	3-717-321-01	o	PROTECTOR, PCT
731	3-717-417-01	o	CAM
732	3-717-418-01	o	PLATE
733	3-717-546-01	o	GUIDE, LOCK OUT
734	3-717-553-01	o	BEARING, SD
735	3-718-657-01	o	HOLDER, LED
736	3-718-740-01	o	PROTECTOR, KY
737	3-718-771-01	o	COVER (U), SD
738	3-718-792-01	o	HOLDER, SHEET
739	3-721-455-01	s	MENU SHEET
740	8-819-942-19	s	DIODE, LB-402VK

9. LEVEL CONTROL



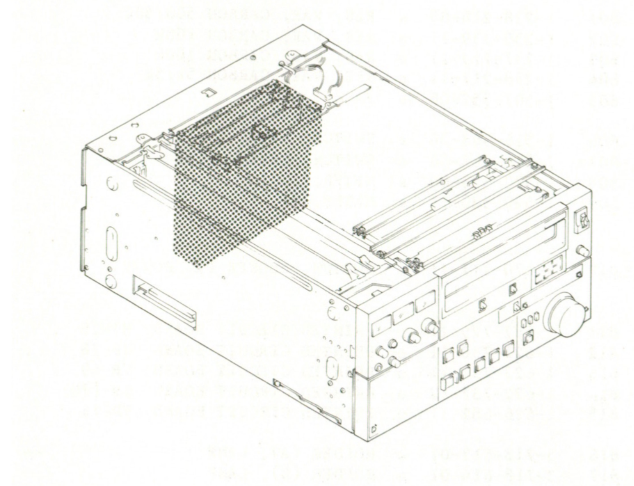
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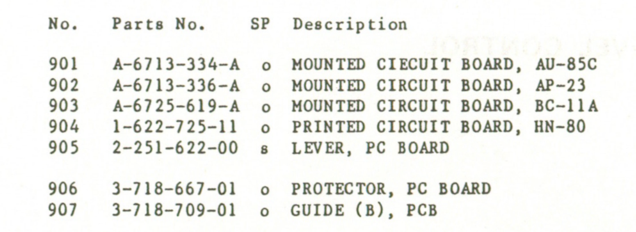
No.	Parts No.	SP	Description
801	1-228-218-00	s	RES, VAR, CARBON 500/500
802	1-230-339-11	s	RES, VAR, CARBON 100k
803	1-237-713-11	s	RES, VAR, CARBON 100k
804	1-238-217-11	s	RES, VAR, CARBON 5k/5k
805	1-507-552-00	s	JACK
806	1-516-963-00	s	SWITCH, LEVER SLIDE
807	1-516-961-00	s	SWITCH, LEVER SLIDE
808	1-520-393-00	s	METER, AUDIO
809	1-520-500-11	s	METER, RF
⚠810	1-570-117-11	s	SWITCH, ROCKER (AC POWER)
811	1-622-729-11	o	PRINTED CIECUIT BOARD, MT-28
812	1-622-730-11	o	PRINTED CIRCUIT BOARD, HP-28
813	1-622-731-11	o	PRINTED CIECUIT BOARD, VR-49
814	1-622-737-12	o	PRINTED CIRCUIT BOARD, SW-170
815	1-626-682-11	o	PRINTED CIRCUIT BOARD, VR-76
816	3-718-613-01	o	HOLDER (A), LAMP
817	3-718-614-01	o	HOLDER (B), LAMP
818	3-718-789-01	o	PLATE, GROUND, HP
819	3-688-814-01	s	CAP, SWITCH

 CHASSIS BLOCK (REAR)



10. CHASSIS BLOCK (REAR)



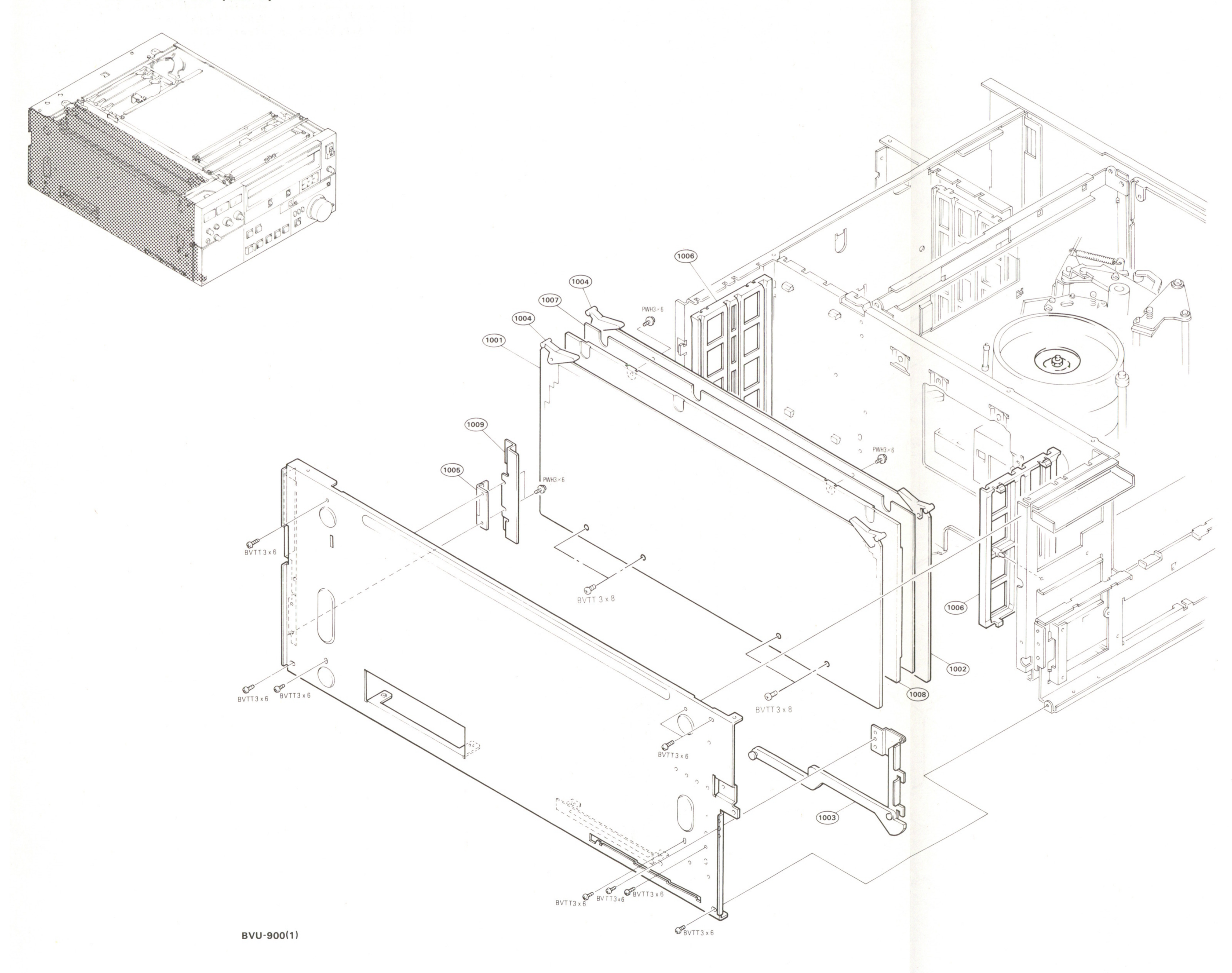


No.	Parts No.	SP	Description
901	A-6713-334-A	o	MOUNTED CIECUIT BOARD, AU-85C
902	A-6713-336-A	o	MOUNTED CIRCUIT BOARD, AP-23
903	A-6725-619-A	o	MOUNTED CIRCUIT BOARD, BC-11A
904	1-622-725-11	o	PRINTED CIRCUIT BOARD, HN-80
905	2-251-622-00	s	LEVER, PC BOARD
906	3-718-667-01	o	PROTECTOR, PC BOARD
907	3-718-709-01	o	GUIDE (B), PCB

905 905 905 905 907 901 903 902 BVTT 3×8 PWH3×5 B2.6×5 906 904

BVU-900(1)

11. CHASSIS BLOCK (LEFT)

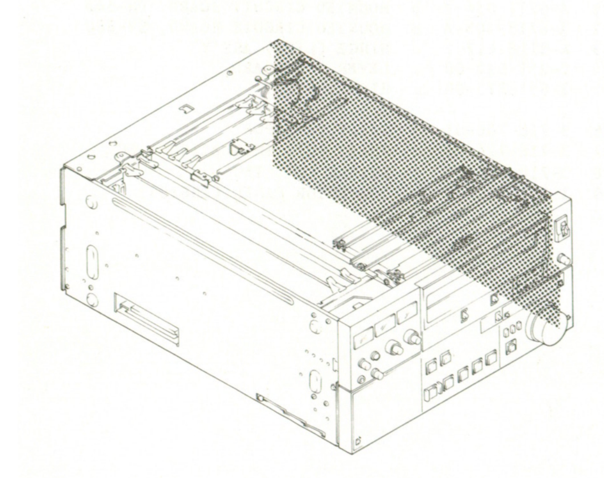


BVU-900(1)

No.	Parts No.	SP	Description
1001	A-6711-956-A	o	MOUNTED CIRCUIT BOARD, DM-54A
1002	A-6715-408-A	o	MOUNTED CIRCUIT BOARD, SV-88C
1003	X-3718-617-1	o	HINGE (LEFT) ASS'Y
1004	2-251-622-00	s	LEVER, PC BOARD
1005	3-651-875-00	s	HINGE, FRONT
1006	3-718-708-01	o	GUIDE (A), PCB
1007	3-718-714-01	o	SHEET (C), INSULATING, TBC
1008	3-718-738-01	o	SHIELD (C), TBC
1009	3-718-772-01	o	CONNECTOR PANEL (ASSIST)

 CHASSIS BLOCK (RIGHT)

12. CHASSIS BLOCK (RIGHT)

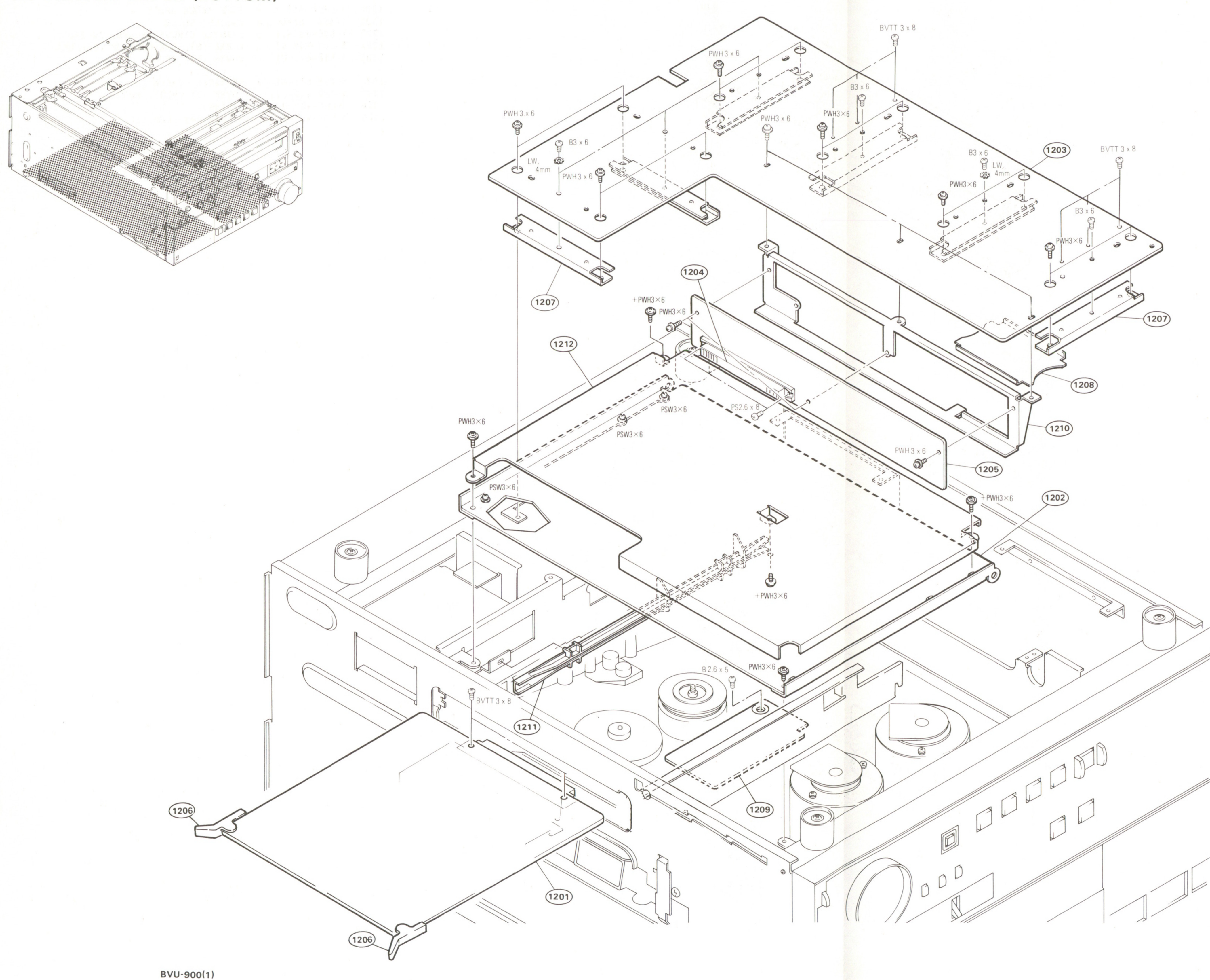


No.	Parts No.	SP	Description
1101	A-6717-495-A	o	MOUNTED CIRCUIT BOARD, PD-45
1102	X-3718-618-1	o	HINGE (RIGHT) ASS'Y
1103	3-646-090-00	s	RIVET, NYLON

BVU-900(1)

 CHASSIS BLOCK (BOTTOM)

13. CHASSIS BLOCK (BOTTOM)

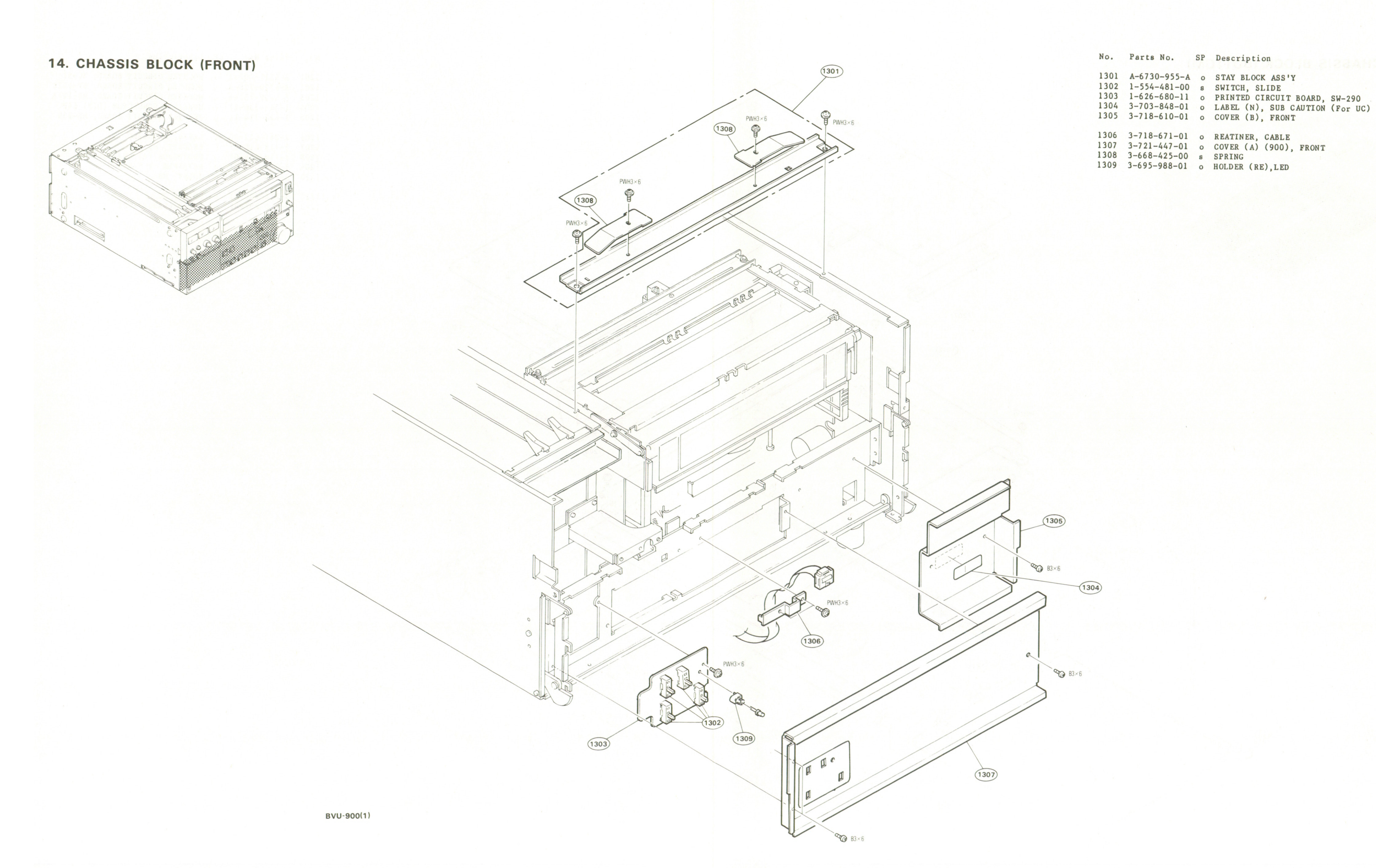


BVU-900(1)

No.	Parts No.	SP	Description
1201	A-6717-497-A	o	MOUNTED CIRCUIT BOARD, TC-51
1202	A-6729-726-A	o	MOUNTED CIRCUIT BOARD, SY-102B
1203	A-6729-731-A	o	MOUNTED CIRCUIT BOARD, MB-127A
1204	1-563-336-21	o	HOUSING, CONNECTOR (DIP) 64P
1205	1-622-714-11	o	PRINTED CIRCUIT BOARD, MB-139
1206	2-251-622-00	s	LEVER, PC BOARD
1207	3-718-616-01	o	BRACKET, MB
1208	3-718-659-01	o	PROTECTOR (A), HARNESS
1209	3-718-692-01	o	RETAINER, V HARNESS
1210	3-718-720-01	o	JOINT, MB
1211	3-718-790-01	o	GUIDE, TC
1212	3-718-791-01	o	SIELD (LARGE), SY

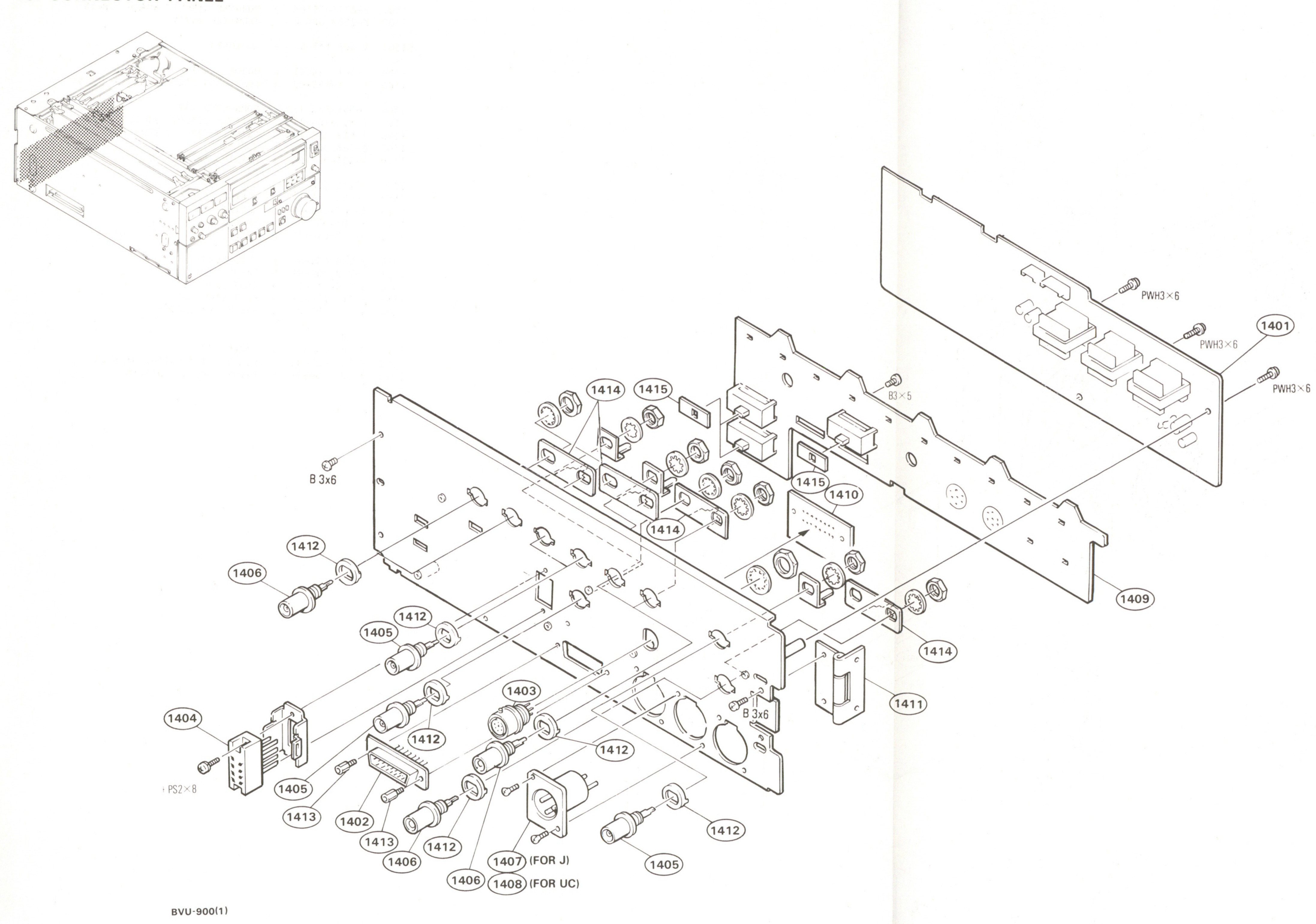
CHASSIS BLOCK (FRONT)

14. CHASSIS BLOCK (FRONT)



No.	Parts No.	SP	Description
1301	A-6730-955-A	o	STAY BLOCK ASS'Y
1302	1-554-481-00	s	SWITCH, SLIDE
1303	1-626-680-11	o	PRINTED CIRCUIT BOARD, SW-290
1304	3-703-848-01	o	LABEL (N), SUB CAUTION (For UC)
1305	3-718-610-01	o	COVER (B), FRONT
1306	3-718-671-01	o	REATINER, CABLE
1307	3-721-447-01	o	COVER (A) (900), FRONT
1308	3-668-425-00	s	SPRING
1309	3-695-988-01	o	HOLDER (RE),LED

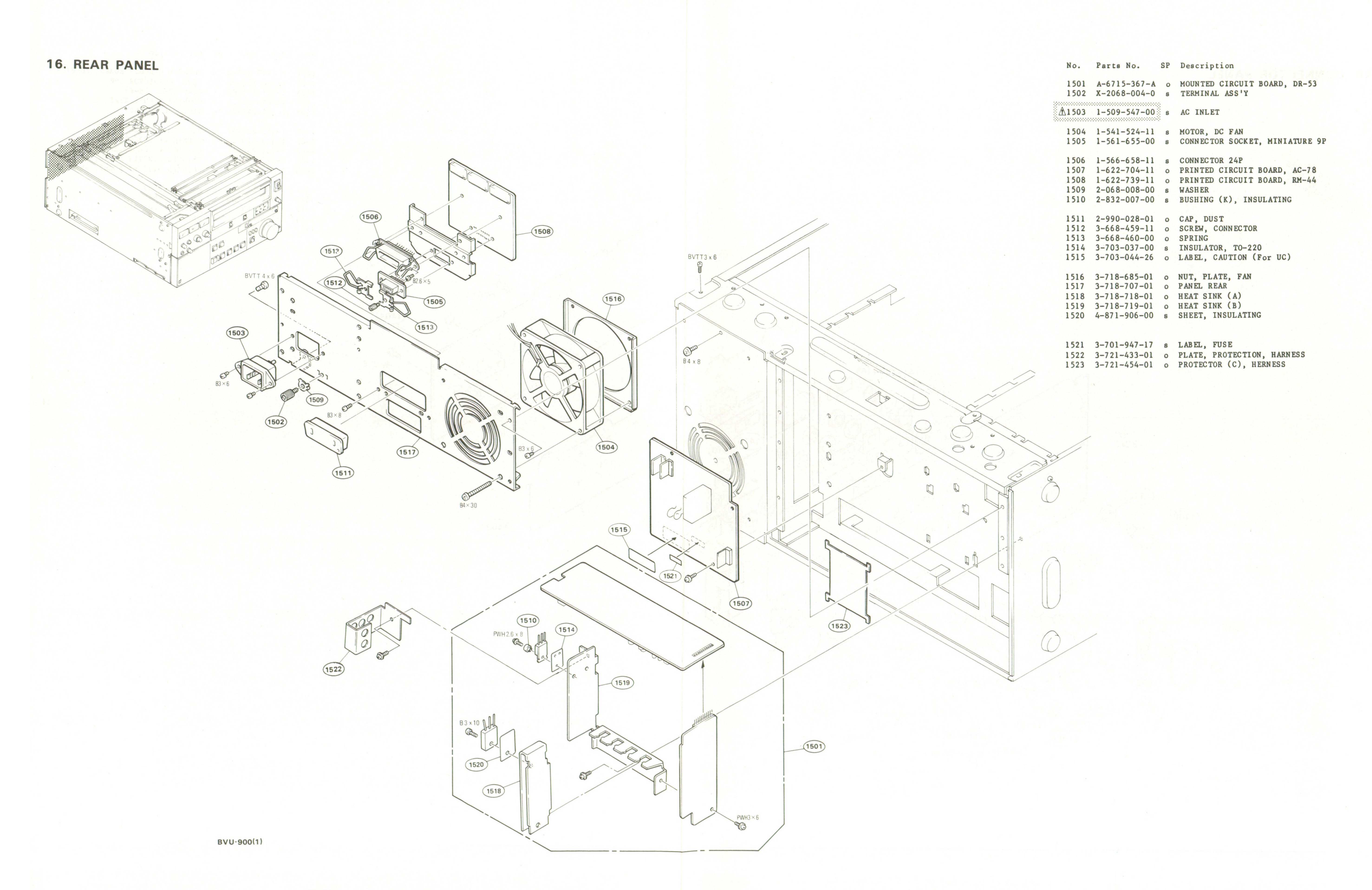
15. CONNECTOR PANEL



BVU-900(1)

No.	Parts No.	SP	Description
1401	A-6713-335-A	o	MOUNTED CIRCUIT BOARD, AU-87A
1402	1-560-769-00	s	PLUG, CONNECTOR 15P
1403	1-561-045-00	s	CONNECTOR, (R-F)
1404	1-561-577-21	s	CONNECTOR (DIP TYPE) 8P
1405	1-562-227-21	s	RECEPTACLE, BNC
1406	1-562-227-41	s	RECEPTACLE, BNC
1407	1-563-029-21	s	CONNECTOR (RECEPTACLE) 3P
1408	1-563-030-21	s	CONNECTOR (RECEPTACLE) 3P
1409	1-622-706-11	o	PRINTED CIRCUIT BOARD, CP-109
1410	1-622-740-11	o	PRINTED CIRCUIT BOARD, RM-45
1411	3-651-875-00	s	HINGE, FRONT
1412	3-654-545-00	s	SPACER, BNC
1413	3-668-459-11	o	SCREW, CONNECTOR
1414	3-718-662-01	o	GROUND, BNC
1415	3-718-757-01	o	CUSION, SW

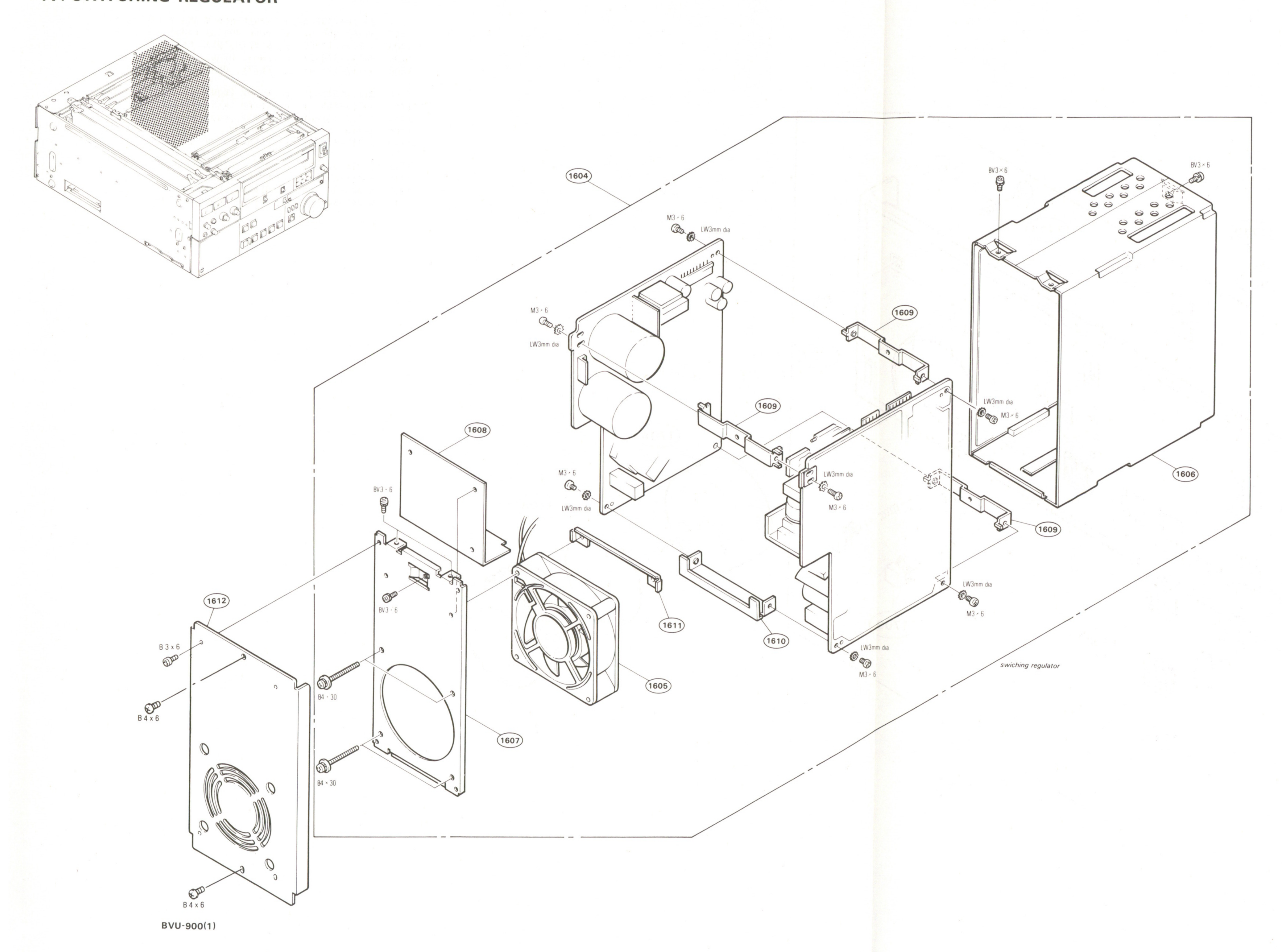
16. REAR PANEL



No.	Parts No.	SP	Description
1501	A-6715-367-A	o	MOUNTED CIRCUIT BOARD, DR-53
1502	X-2068-004-0	s	TERMINAL ASS'Y
⚠1503	1-509-547-00	s	AC INLET
1504	1-541-524-11	s	MOTOR, DC FAN
1505	1-561-655-00	s	CONNECTOR SOCKET, MINIATURE 9P
1506	1-566-658-11	s	CONNECTOR 24P
1507	1-622-704-11	o	PRINTED CIRCUIT BOARD, AC-78
1508	1-622-739-11	o	PRINTED CIRCUIT BOARD, RM-44
1509	2-068-008-00	s	WASHER
1510	2-832-007-00	s	BUSHING (K), INSULATING
1511	2-990-028-01	o	CAP, DUST
1512	3-668-459-11	o	SCREW, CONNECTOR
1513	3-668-460-00	o	SPRING
1514	3-703-037-00	s	INSULATOR, TO-220
1515	3-703-044-26	o	LABEL, CAUTION (For UC)
1516	3-718-685-01	o	NUT, PLATE, FAN
1517	3-718-707-01	o	PANEL REAR
1518	3-718-718-01	o	HEAT SINK (A)
1519	3-718-719-01	o	HEAT SINK (B)
1520	4-871-906-00	s	SHEET, INSULATING
1521	3-701-947-17	s	LABEL, FUSE
1522	3-721-433-01	o	PLATE, PROTECTION, HARNESS
1523	3-721-454-01	o	PROTECTOR (C), HERNESS

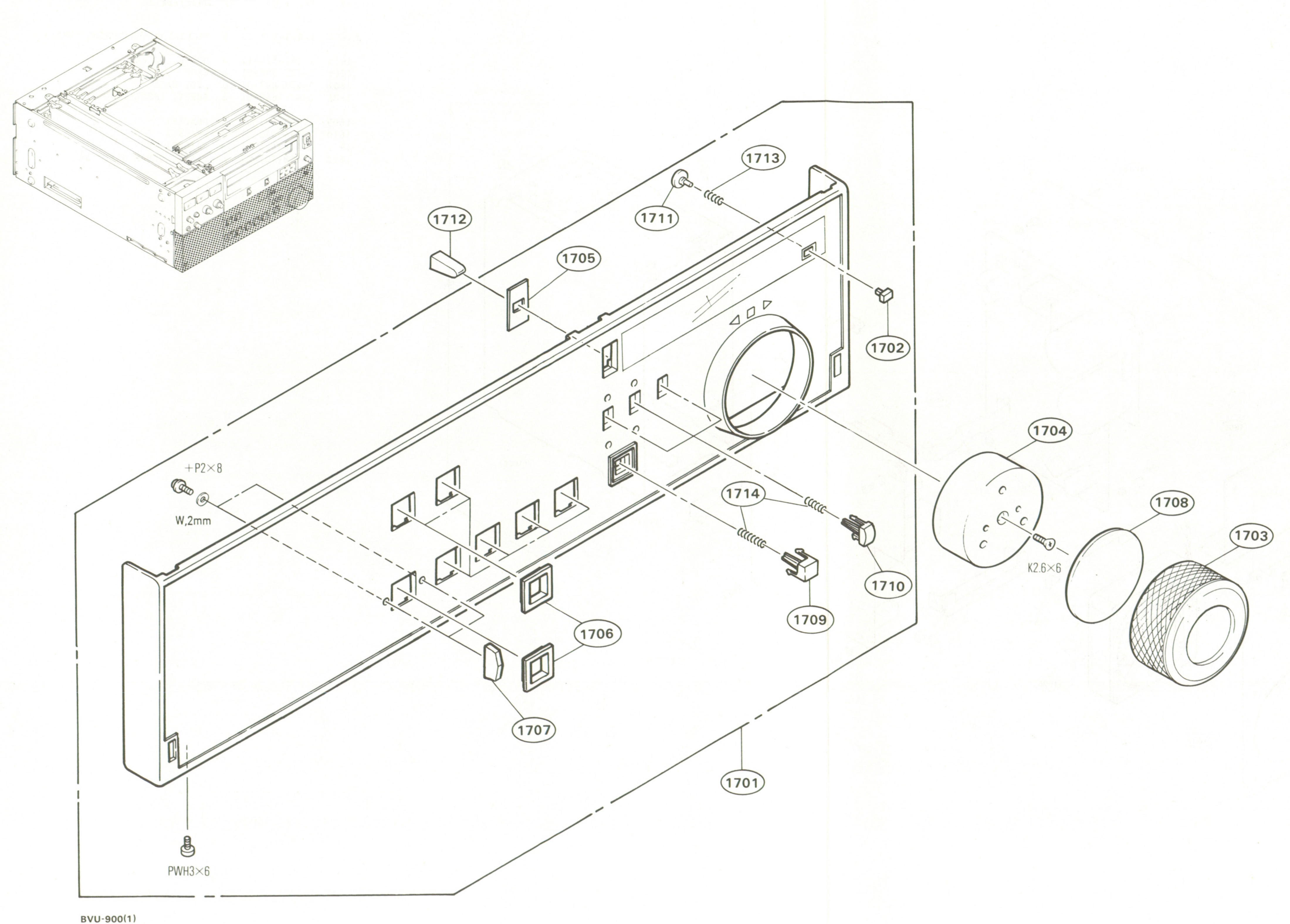
BVU-900(1)

17. SWITCHING REGULATOR



No.	Parts No.	SP	Description
⚠1604	1-413-307-13	s	REGULATOR, SWITCHING (UR21)
1605	1-541-524-11	s	MOTOR, DC FAN
1606	2-403-696-01	o	CASE
1607	2-403-697-01	o	LID, CASE
1608	2-431-668-01	o	SHEET, INSULATING
1609	2-434-441-01	o	BRACKET
1610	2-434-442-01	o	BRACKET
1611	2-434-443-01	o	BRACKET, FAN
1612	3-718-702-01	o	PLATE, ORNAMENTAL, SW

18. ORNAMENTAL PANEL(1)

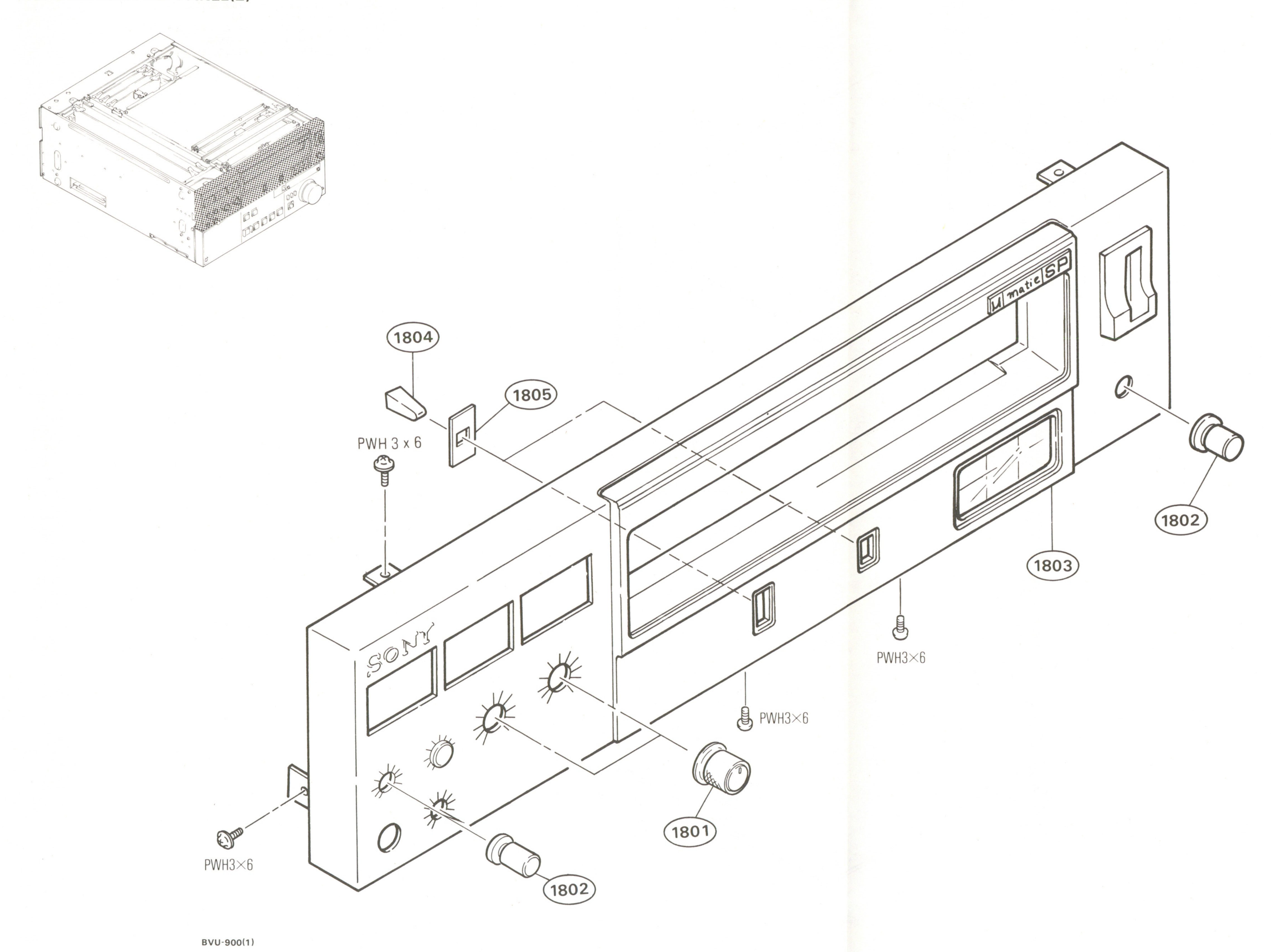


BVU-900(1)

No.	Parts No.	SP	Description
1701	A-6704-331-A	o	PANEL BLOCK ASS'Y (900), KEY
1702	3-668-008-02	s	PUSH BUTTON (3X5)
1703	3-668-012-00	s	RUBBER, DIAL KNOB
1704	3-717-370-01	o	KNOB, DIAL
1705	3-717-373-01	o	PLATE, ORNOMENTAL, LEVER SW
1706	3-717-377-01	o	FLAME (SQUARE 17), ORNAMENTAL
1707	3-717-380-01	o	GUARD, REC
1708	3-717-557-01	o	PLATE, KNOB
1709	3-718-664-01	s	KEY TOP
1710	3-718-681-01	s	PUSH BUTTON
1711	3-718-694-01	s	PIN, PUSH BUTTON
1712	3-718-698-01	s	KNOB, LEVER SW
1713	4-309-349-00	s	SPRING, COIL
1714	4-866-613-00	s	SPRING, COMPRESSION

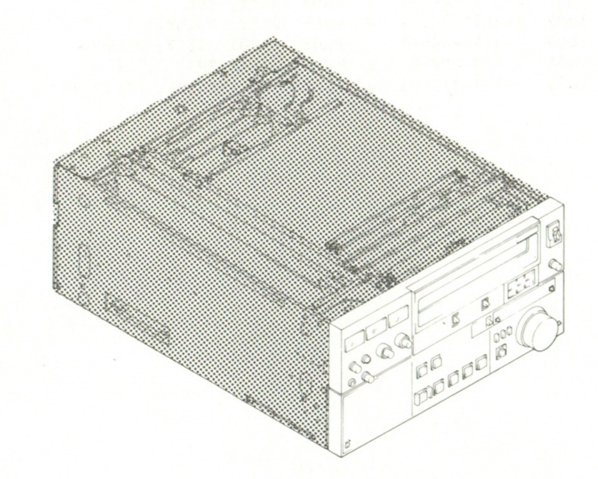
19. ORNAMENTAL PANEL(2)

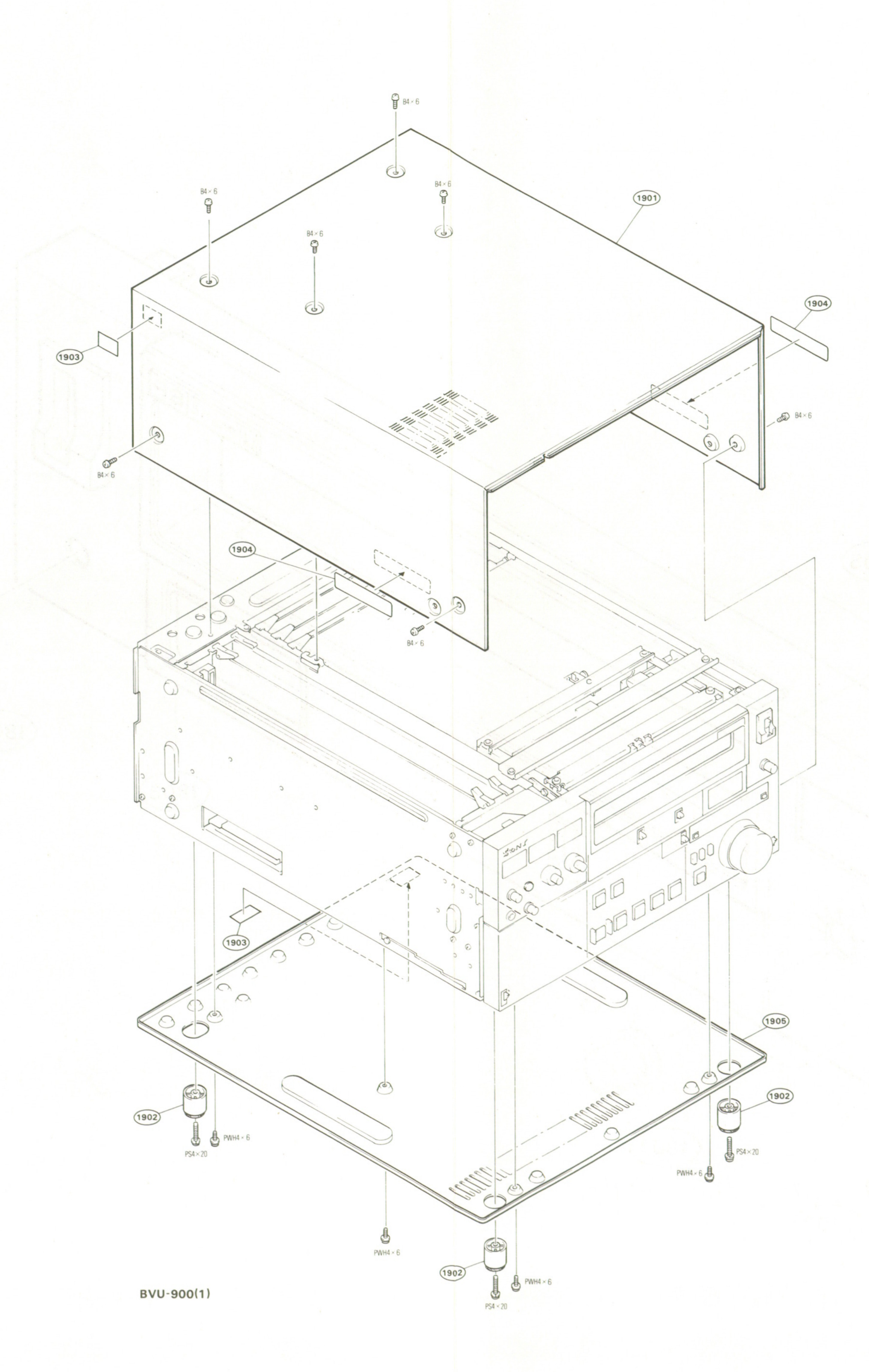
No.	Parts No.	SP	Description
1801	X-2112-801-1	s	KNOB ASS'Y, VOL
1802	X-3672-707-1	s	KNOB ASS'Y, VOLUME
1803	X-3718-646-1	o	PANEL (900) ASS'Y, FRONT
1804	3-718-698-01	s	KNOB, LEVER SW
1805	3-717-373-01	o	PLATE, ORNAMENTAL, LEVER SW



BVU-900(1)

20. ORNAMENTAL PANEL(3)





No.	Parts No.	SP	Description
1901	X-3718-625-1	o	CASE ASS'Y, U
1902	3-642-656-01	s	LEG
1903	3-703-848-01	o	LABEL (N), SUB CAUTION
1904	3-718-691-01	o	CAUTION, VIS
1905	3-718-739-01	o	PLATE, BOTTOM

18-3. ELECTRICAL PARTS LIST

ABBREVIATIONS

Ref. No.	Description	Ref. No.	Description	Ref. No.	Description
C□□, CT□□	CAPACITOR	IC□□	IC	Q□□	TRANSISTOR
CF□□	CERAMIC FILTER	J□□	JACK	R□□, RV□□	RESISTOR
CN□□	CONNECTOR	L□□	INDUCTOR	RY□□	RELAY
D□□	DIODE	M□□	MOTOR	S□□, SW□□	SWITCH
DL□□	DELAY LINE	ME□□	METER	SB□□	SOLAR BATTERY
F□□	FUSE	MIC□□	MICROPHONE	T□□	TRANSFORMER
FB□□	FERRITE BEAD	PG□□	PG COIL	TH□□	THERMISTOR
FL□□	FILTER	PL□□	LAMP	X□□	CRYSTAL
H□□	HEAD	PM□□	SOLENOIDE		

All capacitors are in micro farads unless otherwise specified.

All inductors are in micro henries unless otherwise specified.

All resistors are in ohms.

General Purpose Electrical Parts List

Parts that are not listed in the "reference numbers order list" are shown in following list.
Reference numbers are omitted.

CAPACITOR

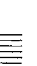
. CERAMIC

Part No.	SP	Description
1-161-039-00	s	CAP, CERAMIC 0.001 10% 50V
1-161-041-00	s	CAP, CERAMIC 0.0015 10% 50V
1-161-043-00	s	CAP, CERAMIC 0.0022 10% 50V
1-161-045-00	s	CAP, CERAMIC 0.0033 10% 50V
1-161-047-00	s	CAP, CERAMIC 0.0047 10% 50V
1-161-049-00	s	CAP, CERAMIC 0.0068 10% 50V
1-161-051-00	s	CAP, CERAMIC 0.01 10% 50V
1-161-053-00	s	CAP, CERAMIC 0.015 10% 50V
1-161-055-00	s	CAP, CERAMIC 0.022 10% 50V
1-161-057-00	s	CAP, CERAMIC 0.033 10% 50V
1-161-021-11	s	CAP, CERAMIC 0.047 10% 25V
1-161-059-00	s	CAP, CERAMIC 0.047 10% 50V
1-161-061-00	s	CAP, CERAMIC 0.068 10% 50V
1-161-772-11	s	CAP, CERAMIC 0.1 10% 25V
1-161-063-00	s	CAP, CERAMIC 0.1 10% 50V

. MYLAR

Part No.	SP	Description
1-130-467-00	s	CAP, MYLAR 470pF 5% 50V
1-130-468-00	s	CAP, MYLAR 560pF 5% 50V
1-130-469-00	s	CAP, MYLAR 680pF 5% 50V
1-130-470-00	s	CAP, MYLAR 820pF 5% 50V
1-130-471-00	s	CAP, MYLAR 1000pF 5% 50V
1-130-472-00	s	CAP, MYLAR 1200pF 5% 50V
1-130-473-00	s	CAP, MYLAR 1500pF 5% 50V
1-130-474-00	s	CAP, MYLAR 1800pF 5% 50V
1-130-475-00	s	CAP, MYLAR 2200pF 5% 50V
1-130-476-00	s	CAP, MYLAR 2700pF 5% 50V
1-130-477-00	s	CAP, MYLAR 3300pF 5% 50V
1-130-478-00	s	CAP, MYLAR 3900pF 5% 50V
1-130-479-00	s	CAP, MYLAR 4700pF 5% 50V
1-130-480-00	s	CAP, MYLAR 5600pF 5% 50V
1-130-481-00	s	CAP, MYLAR 6800pF 5% 50V
1-130-482-00	s	CAP, MYLAR 8200pF 5% 50V
1-130-483-00	s	CAP, MYLAR 0.01 5% 50V
1-130-484-00	s	CAP, MYLAR 0.012 5% 50V
1-130-485-00	s	CAP, MYLAR 0.015 5% 50V
1-130-486-00	s	CAP, MYLAR 0.018 5% 50V
1-130-487-00	s	CAP, MYLAR 0.022 5% 50V
1-130-488-00	s	CAP, MYLAR 0.027 5% 50V
1-130-489-00	s	CAP, MYLAR 0.033 5% 50V
1-130-490-11	s	CAP, MYLAR 0.039 5% 50V
1-130-491-00	s	CAP, MYLAR 0.047 5% 50V
1-130-492-11	s	CAP, MYLAR 0.056 5% 50V
1-130-493-00	s	CAP, MYLAR 0.068 5% 50V
1-130-494-11	s	CAP, MYLAR 0.082 5% 50V
1-130-495-00	s	CAP, MYLAR 0.1 5% 50V
1-130-496-00	s	CAP, MYLAR 0.12 5% 50V
1-130-497-00	s	CAP, MYLAR 0.15 5% 50V
1-130-498-00	s	CAP, MYLAR 0.18 5% 50V
1-130-499-00	s	CAP, MYLAR 0.22 5% 50V
1-136-502-11	s	CAP, MYLAR 0.33 5% 50V

Part No.	SP	Description
. TANTALUM		
1-131-396-11	s	CAP, TANTALUM 0.01 20% 35V
1-131-397-11	s	CAP, TANTALUM 0.015 20% 35V
1-131-398-11	s	CAP, TANTALUM 0.022 20% 35V
1-131-399-11	s	CAP, TANTALUM 0.033 20% 35V
1-131-400-11	s	CAP, TANTALUM 0.047 20% 35V
1-131-401-21	s	CAP, TANTALUM 0.068 10% 35V
1-131-341-21	s	CAP, TANTALUM 0.1 10% 35V
1-131-342-21	s	CAP, TANTALUM 0.15 10% 35V
1-131-343-21	s	CAP, TANTALUM 0.22 10% 35V
1-131-344-21	s	CAP, TANTALUM 0.33 10% 35V
1-131-412-11	s	CAP, TANTALUM 0.47 20% 20V
1-131-345-21	s	CAP, TANTALUM 0.47 10% 35V
1-131-410-11	s	CAP, TANTALUM 0.68 20% 25V
1-131-346-21	s	CAP, TANTALUM 0.68 10% 35V
1-131-413-11	s	CAP, TANTALUM 1.0 20% 20V
1-131-347-21	s	CAP, TANTALUM 1.0 10% 35V
1-131-416-11	s	CAP, TANTALUM 1.5 20% 16V
1-131-348-21	s	CAP, TANTALUM 1.5 10% 35V
1-131-419-11	s	CAP, TANTALUM 2.2 20% 10V
1-131-361-21	s	CAP, TANTALUM 2.2 10% 20V
1-131-349-21	s	CAP, TANTALUM 2.2 10% 35V
1-131-422-11	s	CAP, TANTALUM 3.3 20% 6.3V
1-131-368-21	s	CAP, TANTALUM 3.3 10% 16V
1-131-356-21	s	CAP, TANTALUM 3.3 10% 25V
1-131-350-21	s	CAP, TANTALUM 3.3 10% 35V
1-131-425-11	s	CAP, TANTALUM 4.7 20% 3.15V
1-131-375-21	s	CAP, TANTALUM 4.7 10% 10V
1-131-363-21	s	CAP, TANTALUM 4.7 10% 20V
1-131-351-21	s	CAP, TANTALUM 4.7 10% 35V
1-131-382-21	s	CAP, TANTALUM 6.8 10% 6.3V
1-131-370-21	s	CAP, TANTALUM 6.8 10% 16V
1-131-358-21	s	CAP, TANTALUM 6.8 10% 25V
1-131-352-21	s	CAP, TANTALUM 6.8 10% 35V
1-131-389-21	s	CAP, TANTALUM 10 10% 3.15V
1-131-377-21	s	CAP, TANTALUM 10 10% 10V
1-131-365-21	s	CAP, TANTALUM 10 10% 20V
1-131-353-21	s	CAP, TANTALUM 10 10% 35V
1-131-384-21	s	CAP, TANTALUM 15 10% 6.3V
1-131-372-21	s	CAP, TANTALUM 15 10% 16V
1-131-360-21	s	CAP, TANTALUM 15 10% 25V
1-131-391-21	s	CAP, TANTALUM 22 10% 3.15V
1-131-379-21	s	CAP, TANTALUM 22 10% 10V
1-131-367-21	s	CAP, TANTALUM 22 10% 20V
1-131-386-21	s	CAP, TANTALUM 33 10% 6.3V
1-131-374-21	s	CAP, TANTALUM 33 10% 16V
1-131-393-21	s	CAP, TANTALUM 47 10% 3.15V
1-131-381-21	s	CAP, TANTALUM 47 10% 10V
1-131-388-21	s	CAP, TANTALUM 68 10% 6.3V
1-131-395-21	s	CAP, TANTALUM 100 10% 3.15V



Part No.	SP	Description
. ELECTROLYTIC		
1-124-902-00	s	CAP, ELECT 0.47 20% 50V
1-124-791-11	s	CAP, ELECT 1.0 20% 100V
1-124-925-11	s	CAP, ELECT 2.2 20% 100V
1-123-382-00	s	CAP, ELECT 3.3 20% 100V
1-124-927-00	s	CAP, ELECT 4.7 20% 100V
1-123-875-91	s	CAP, ELECT 10 20% 50V
1-124-915-11	s	CAP, ELECT 10 20% 63V
1-124-667-11	s	CAP, ELECT 10 20% 100V
1-124-908-11	s	CAP, ELECT 22 20% 50V
1-124-916-11	s	CAP, ELECT 22 20% 63V
1-124-929-11	s	CAP, ELECT 22 20% 100V
1-124-963-11	s	CAP, ELECT 33 20% 16V
1-124-482-11	s	CAP, ELECT 33 20% 35V
1-124-917-11	s	CAP, ELECT 33 20% 63V
1-124-930-11	s	CAP, ELECT 33 20% 100V
1-124-446-11	s	CAP, ELECT 47 20% 10V
1-124-477-11	s	CAP, ELECT 47 20% 25V
1-124-910-11	s	CAP, ELECT 47 20% 50V
1-124-918-11	s	CAP, ELECT 47 20% 63V
1-124-931-11	s	CAP, ELECT 47 20% 100V
1-124-443-00	s	CAP, ELECT 100 20% 10V
1-126-101-11	s	CAP, ELECT 100 20% 16V
1-124-478-11	s	CAP, ELECT 100 20% 25V
1-124-122-11	s	CAP, ELECT 100 20% 50V
1-124-572-11	s	CAP, ELECT 100 20% 63V
1-123-605-00	s	CAP, ELECT 100 20% 100V
1-124-444-00	s	CAP, ELECT 220 20% 10V
1-124-120-11	s	CAP, ELECT 220 20% 25V
1-124-484-11	s	CAP, ELECT 220 20% 35V
1-124-911-11	s	CAP, ELECT 220 20% 50V
1-124-919-51	s	CAP, ELECT 220 20% 63V
1-124-628-11	s	CAP, ELECT 220 20% 100V
1-124-442-00	s	CAP, ELECT 330 20% 6.3V
1-124-604-00	s	CAP, ELECT 330 20% 10V
1-124-119-00	s	CAP, ELECT 330 20% 16V
1-124-479-11	s	CAP, ELECT 330 20% 25V
1-124-485-11	s	CAP, ELECT 330 20% 35V
1-124-912-11	s	CAP, ELECT 330 20% 50V
1-124-472-11	s	CAP, ELECT 470 20% 10V
1-124-475-11	s	CAP, ELECT 470 20% 16V
1-124-480-11	s	CAP, ELECT 470 20% 25V
1-126-104-11	s	CAP, ELECT 470 20% 35V
1-124-913-11	s	CAP, ELECT 470 20% 50V
1-124-921-11	s	CAP, ELECT 470 20% 63V
1-124-471-00	s	CAP, ELECT 1000 20% 6.3V
1-124-473-11	s	CAP, ELECT 1000 20% 10V
1-124-555-00	s	CAP, ELECT 1000 20% 16V
1-124-557-11	s	CAP, ELECT 1000 20% 25V
1-126-105-11	s	CAP, ELECT 1000 20% 35V
1-124-637-11	s	CAP, ELECT 1000 20% 50V
1-124-922-11	s	CAP, ELECT 1000 20% 63V
1-124-893-11	s	CAP, ELECT 2200 20% 10V
1-124-556-11	s	CAP, ELECT 2200 20% 16V
1-124-563-11	s	CAP, ELECT 2200 20% 25V
1-124-618-11	s	CAP, ELECT 2200 20% 35V
1-124-607-11	s	CAP, ELECT 2200 20% 50V
1-124-621-11	s	CAP, ELECT 3300 20% 6.3V
1-124-887-00	s	CAP, ELECT 3300 20% 16V
1-124-636-00	s	CAP, ELECT 3300 20% 25V
1-124-762-00	s	CAP, ELECT 4700 20% 10V
1-124-898-11	s	CAP, ELECT 4700 20% 16V
1-124-564-11	s	CAP, ELECT 4700 20% 25V
1-124-891-11	s	CAP, ELECT 10000 20% 6.3V
1-124-763-00	s	CAP, ELECT 10000 20% 10V

Part No.	SP	Description
. MICA, SILVERED		
1-107-019-00	s	CAP, MICA 1.0pF ±0.5pF 500V
1-107-039-00	s	CAP, MICA 1.2pF ±0.5pF 500V
1-107-040-00	s	CAP, MICA 1.5pF ±0.5pF 500V
1-107-041-00	s	CAP, MICA 1.8pF ±0.5pF 500V
1-107-042-00	s	CAP, MICA 2.2pF ±0.5pF 500V
1-107-043-00	s	CAP, MICA 2.7pF ±0.5pF 500V
1-107-044-00	s	CAP, MICA 3.3pF ±0.5pF 500V
1-107-045-00	s	CAP, MICA 3.9pF ±0.5pF 500V
1-107-046-00	s	CAP, MICA 4.7pF ±0.5pF 500V
1-107-026-00	s	CAP, MICA 5.1pF ±0.5pF 500V
1-107-047-00	s	CAP, MICA 5.6pF ±0.5pF 500V
1-107-048-00	s	CAP, MICA 6.8pF ±0.5pF 500V
1-107-049-00	s	CAP, MICA 8.2pF ±0.5pF 500V
1-107-202-00	s	CAP, MICA 10pF 5% 500V
1-107-203-00	s	CAP, MICA 11pF 5% 500V
1-107-204-00	s	CAP, MICA 12pF 5% 500V
1-107-205-00	s	CAP, MICA 13pF 5% 500V
1-107-206-00	s	CAP, MICA 15pF 5% 500V
1-107-207-00	s	CAP, MICA 16pF 5% 500V
1-107-208-00	s	CAP, MICA 18pF 5% 500V
1-107-209-00	s	CAP, MICA 20pF 5% 500V
1-107-210-00	s	CAP, MICA 22pF 5% 500V
1-107-211-00	s	CAP, MICA 24pF 5% 500V
1-107-157-00	s	CAP, MICA 27pF 5% 500V
1-107-158-00	s	CAP, MICA 30pF 5% 500V
1-107-159-00	s	CAP, MICA 33pF 5% 500V
1-107-074-00	s	CAP, MICA 36pF 5% 50V
1-107-075-00	s	CAP, MICA 39pF 5% 50V
1-107-076-00	s	CAP, MICA 43pF 5% 50V
1-107-077-00	s	CAP, MICA 47pF 5% 50V
1-107-164-00	s	CAP, MICA 51pF 5% 500V
1-107-165-00	s	CAP, MICA 56pF 5% 500V
1-107-166-00	s	CAP, MICA 62pF 5% 500V
1-107-036-00	s	CAP, MICA 68pF 5% 500V
1-107-167-00	s	CAP, MICA 75pF 5% 500V
1-107-083-00	s	CAP, MICA 82pF 5% 50V
1-107-084-00	s	CAP, MICA 91pF 5% 50V
1-107-085-00	s	CAP, MICA 100pF 5% 50V
1-107-086-00	s	CAP, MICA 110pF 5% 50V
1-107-087-00	s	CAP, MICA 120pF 5% 50V
1-109-538-00	s	CAP, MICA 130pF 5% 100V
1-109-539-00	s	CAP, MICA 150pF 5% 100V
1-107-090-00	s	CAP, MICA 160pF 5% 50V
1-109-540-00	s	CAP, MICA 180pF 5% 100V
1-109-541-00	s	CAP, MICA 200pF 5% 100V
1-109-542-00	s	CAP, MICA 220pF 5% 100V
1-109-545-00	s	CAP, MICA 270pF 5% 100V
1-109-547-00	s	CAP, MICA 330pF 5% 100V
1-109-549-00	s	CAP, MICA 390pF 5% 100V
1-109-633-00	s	CAP, MICA 470pF 2% 500V
1-109-555-00	s	CAP, MICA 560pF 5% 100V
1-109-635-00	s	CAP, MICA 470pF 2% 500V

Part No.	SP	Description
INDUCTOR		
. MICRO		
1-408-397-00	s	INDUCTOR, MICRO 1.0 5%
1-408-399-00	s	INDUCTOR, MICRO 1.5 5%
1-408-400-00	s	INDUCTOR, MICRO 1.8 5%
1-408-401-00	s	INDUCTOR, MICRO 2.2 5%
1-408-403-00	s	INDUCTOR, MICRO 3.3 5%
1-408-404-00	s	INDUCTOR, MICRO 3.9 5%
1-408-405-00	s	INDUCTOR, MICRO 4.7 5%
1-408-406-00	s	INDUCTOR, MICRO 5.6 5%
1-408-407-00	s	INDUCTOR, MICRO 6.8 5%
1-408-408-00	s	INDUCTOR, MICRO 8.2 5%
1-408-409-00	s	INDUCTOR, MICRO 10 5%
1-408-410-00	s	INDUCTOR, MICRO 12 5%
1-408-411-00	s	INDUCTOR, MICRO 15 5%
1-408-412-00	s	INDUCTOR, MICRO 18 5%
1-408-413-00	s	INDUCTOR, MICRO 22 5%
1-408-414-00	s	INDUCTOR, MICRO 27 5%
1-408-415-00	s	INDUCTOR, MICRO 33 5%
1-408-416-00	s	INDUCTOR, MICRO 39 5%
1-408-417-00	s	INDUCTOR, MICRO 47 5%
1-408-418-00	s	INDUCTOR, MICRO 56 5%
1-408-419-00	s	INDUCTOR, MICRO 68 5%
1-408-420-00	s	INDUCTOR, MICRO 82 5%
1-408-421-00	s	INDUCTOR, MICRO 100 5%
1-408-422-00	s	INDUCTOR, MICRO 120 5%
1-408-423-00	s	INDUCTOR, MICRO 150 5%
1-408-424-00	s	INDUCTOR, MICRO 180 5%
1-408-425-00	s	INDUCTOR, MICRO 220 5%
1-408-426-00	s	INDUCTOR, MICRO 270 5%
1-408-427-00	s	INDUCTOR, MICRO 330 5%
1-408-428-00	s	INDUCTOR, MICRO 390 5%
1-408-429-00	s	INDUCTOR, MICRO 470 5%
1-410-116-11	s	INDUCTOR, MICRO 560 5%
1-410-492-11	s	INDUCTOR, MICRO 680 5%
1-410-493-11	s	INDUCTOR, MICRO 820 5%
1-410-494-11	s	INDUCTOR, MICRO 1000 5%



RESISTOR

. CARBON

Part No.	SP	Description
1-249-381-11	s	RES, CARBON 1.0 5% 1/6W
1-249-382-11	s	RES, CARBON 1.2 5% 1/6W
1-249-383-11	s	RES, CARBON 1.5 5% 1/6W
1-249-384-11	s	RES, CARBON 1.8 5% 1/6W
1-249-385-11	s	RES, CARBON 2.2 5% 1/6W
1-249-386-11	s	RES, CARBON 2.7 5% 1/6W
1-249-387-11	s	RES, CARBON 3.3 5% 1/6W
1-249-388-11	s	RES, CARBON 3.9 5% 1/6W
1-249-389-11	s	RES, CARBON 4.7 5% 1/6W
1-249-390-11	s	RES, CARBON 5.6 5% 1/6W
1-249-391-11	s	RES, CARBON 6.8 5% 1/6W
1-249-392-11	s	RES, CARBON 8.2 5% 1/6W
1-249-393-11	s	RES, CARBON 10 5% 1/6W
1-249-394-11	s	RES, CARBON 12 5% 1/6W
1-249-395-11	s	RES, CARBON 15 5% 1/6W
1-249-396-11	s	RES, CARBON 18 5% 1/6W
1-249-397-11	s	RES, CARBON 22 5% 1/6W
1-249-398-11	s	RES, CARBON 27 5% 1/6W
1-249-399-11	s	RES, CARBON 33 5% 1/6W
1-249-400-11	s	RES, CARBON 39 5% 1/6W
1-249-401-11	s	RES, CARBON 47 5% 1/6W
1-249-402-11	s	RES, CARBON 56 5% 1/6W
1-249-403-11	s	RES, CARBON 68 5% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-249-404-11	s	RES, CARBON 82 5% 1/6W
1-249-405-11	s	RES, CARBON 100 5% 1/6W
1-249-406-11	s	RES, CARBON 120 5% 1/6W
1-249-407-11	s	RES, CARBON 150 5% 1/6W
1-249-408-11	s	RES, CARBON 180 5% 1/6W
1-249-409-11	s	RES, CARBON 220 5% 1/6W
1-249-410-11	s	RES, CARBON 270 5% 1/6W
1-249-411-11	s	RES, CARBON 330 5% 1/6W
1-249-412-11	s	RES, CARBON 390 5% 1/6W
1-249-413-11	s	RES, CARBON 470 5% 1/6W
1-249-414-11	s	RES, CARBON 560 5% 1/6W
1-249-415-11	s	RES, CARBON 680 5% 1/6W
1-249-416-11	s	RES, CARBON 820 5% 1/6W
1-249-417-11	s	RES, CARBON 1.0k 5% 1/6W
1-249-418-11	s	RES, CARBON 1.2k 5% 1/6W
1-249-419-11	s	RES, CARBON 1.5k 5% 1/6W
1-249-420-11	s	RES, CARBON 1.8k 5% 1/6W
1-249-421-11	s	RES, CARBON 2.2k 5% 1/6W
1-249-422-11	s	RES, CARBON 2.7k 5% 1/6W
1-249-423-11	s	RES, CARBON 3.3k 5% 1/6W
1-249-424-11	s	RES, CARBON 3.9k 5% 1/6W
1-249-425-11	s	RES, CARBON 4.7k 5% 1/6W
1-249-426-11	s	RES, CARBON 5.6k 5% 1/6W
1-249-427-11	s	RES, CARBON 6.8k 5% 1/6W
1-249-428-11	s	RES, CARBON 8.2k 5% 1/6W
1-249-429-11	s	RES, CARBON 10k 5% 1/6W
1-249-430-11	s	RES, CARBON 12k 5% 1/6W
1-249-431-11	s	RES, CARBON 15k 5% 1/6W
1-249-432-11	s	RES, CARBON 18k 5% 1/6W
1-249-433-11	s	RES, CARBON 22k 5% 1/6W
1-249-434-11	s	RES, CARBON 27k 5% 1/6W
1-249-435-11	s	RES, CARBON 33k 5% 1/6W
1-249-436-11	s	RES, CARBON 39k 5% 1/6W
1-249-437-11	s	RES, CARBON 47k 5% 1/6W
1-249-438-11	s	RES, CARBON 56k 5% 1/6W
1-249-439-11	s	RES, CARBON 68k 5% 1/6W

Part No.	SP	Description
1-249-440-11	s	RES, CARBON 82k 5% 1/6W
1-249-441-11	s	RES, CARBON 100k 5% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

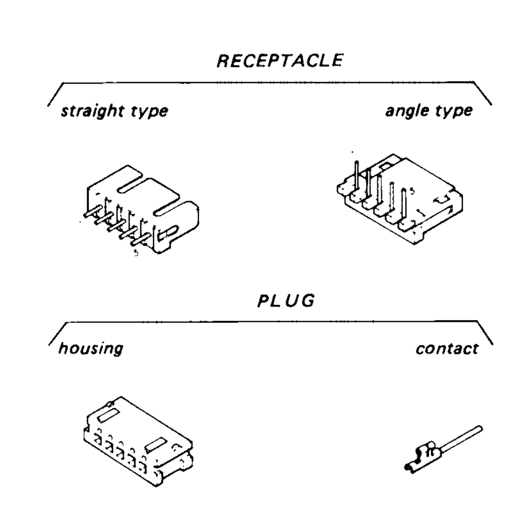
Part No.	SP	Description
. METAL		
1-215-373-31	s	RES, METAL 10 1% 1/6W
1-215-374-00	s	RES, METAL 11 1% 1/6W
1-215-375-00	s	RES, METAL 12 1% 1/6W
1-215-376-00	s	RES, METAL 13 1% 1/6W
1-215-377-00	s	RES, METAL 15 1% 1/6W
1-215-378-00	s	RES, METAL 16 1% 1/6W
1-215-379-00	s	RES, METAL 18 1% 1/6W
1-215-380-00	s	RES, METAL 20 1% 1/6W
1-215-381-00	s	RES, METAL 22 1% 1/6W
1-215-382-00	s	RES, METAL 24 1% 1/6W
1-215-383-00	s	RES, METAL 27 1% 1/6W
1-215-384-00	s	RES, METAL 30 1% 1/6W
1-215-385-00	s	RES, METAL 33 1% 1/6W
1-215-386-00	s	RES, METAL 36 1% 1/6W
1-215-387-00	s	RES, METAL 39 1% 1/6W
1-215-388-00	s	RES, METAL 43 1% 1/6W
1-215-389-00	s	RES, METAL 47 1% 1/6W
1-215-390-00	s	RES, METAL 51 1% 1/6W
1-215-391-00	s	RES, METAL 56 1% 1/6W
1-215-392-00	s	RES, METAL 62 1% 1/6W
1-215-393-00	s	RES, METAL 68 1% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-215-395-00	s	RES, METAL 82 1% 1/6W
1-215-396-00	s	RES, METAL 91 1% 1/6W
1-215-397-00	s	RES, METAL 100 1% 1/6W
1-215-398-00	s	RES, METAL 110 1% 1/6W
1-215-399-00	s	RES, METAL 120 1% 1/6W
1-215-400-00	s	RES, METAL 130 1% 1/6W
1-215-401-00	s	RES, METAL 150 1% 1/6W
1-215-402-00	s	RES, METAL 160 1% 1/6W
1-215-403-00	s	RES, METAL 180 1% 1/6W
1-215-404-00	s	RES, METAL 200 1% 1/6W
1-215-405-00	s	RES, METAL 220 1% 1/6W
1-215-406-00	s	RES, METAL 240 1% 1/6W
1-215-407-00	s	RES, METAL 270 1% 1/6W
1-215-408-00	s	RES, METAL 300 1% 1/6W
1-215-409-00	s	RES, METAL 330 1% 1/6W
1-215-410-00	s	RES, METAL 360 1% 1/6W
1-215-411-00	s	RES, METAL 390 1% 1/6W
1-215-412-00	s	RES, METAL 430 1% 1/6W
1-215-413-00	s	RES, METAL 470 1% 1/6W
1-215-414-00	s	RES, METAL 510 1% 1/6W
1-215-415-00	s	RES, METAL 560 1% 1/6W
1-215-416-00	s	RES, METAL 620 1% 1/6W
1-215-417-00	s	RES, METAL 680 1% 1/6W
1-215-418-00	s	RES, METAL 750 1% 1/6W
1-215-419-00	s	RES, METAL 820 1% 1/6W
1-215-420-00	s	RES, METAL 910 1% 1/6W
1-215-421-00	s	RES, METAL 1.0k 1% 1/6W
1-215-422-00	s	RES, METAL 1.1k 1% 1/6W
1-215-423-00	s	RES, METAL 1.2k 1% 1/6W
1-215-424-00	s	RES, METAL 1.3k 1% 1/6W
1-215-425-00	s	RES, METAL 1.5k 1% 1/6W
1-215-426-00	s	RES, METAL 1.6k 1% 1/6W
1-215-427-00	s	RES, METAL 1.8k 1% 1/6W
1-215-428-00	s	RES, METAL 2.0k 1% 1/6W
1-215-429-00	s	RES, METAL 2.2k 1% 1/6W
1-215-430-00	s	RES, METAL 2.4k 1% 1/6W
1-215-431-00	s	RES, METAL 2.7k 1% 1/6W
1-215-432-00	s	RES, METAL 3.0k 1% 1/6W

Part No.	SP	Description
1-215-433-00	s	RES, METAL 3.3k 1% 1/6W
1-215-434-00	s	RES, METAL 3.6k 1% 1/6W
1-215-435-00	s	RES, METAL 3.9k 1% 1/6W
1-215-436-00	s	RES, METAL 4.3k 1% 1/6W
1-215-437-00	s	RES, METAL 4.7k 1% 1/6W
1-215-438-00	s	RES, METAL 5.1k 1% 1/6W
1-215-439-00	s	RES, METAL 5.6k 1% 1/6W
1-215-440-00	s	RES, METAL 6.2k 1% 1/6W
1-215-441-00	s	RES, METAL 6.8k 1% 1/6W
1-215-442-00	s	RES, METAL 7.5k 1% 1/6W
1-215-443-00	s	RES, METAL 8.2k 1% 1/6W
1-215-444-00	s	RES, METAL 9.1k 1% 1/6W
1-215-445-00	s	RES, METAL 10k 1% 1/6W
1-215-446-00	s	RES, METAL 11k 1% 1/6W
1-215-447-00	s	RES, METAL 12k 1% 1/6W
1-215-448-00	s	RES, METAL 13k 1% 1/6W
1-215-449-00	s	RES, METAL 15k 1% 1/6W
1-215-450-00	s	RES, METAL 16k 1% 1/6W
1-215-451-00	s	RES, METAL 18k 1% 1/6W
1-215-452-00	s	RES, METAL 20k 1% 1/6W
1-215-453-00	s	RES, METAL 22k 1% 1/6W
1-215-454-00	s	RES, METAL 24k 1% 1/6W
1-215-455-00	s	RES, METAL 27k 1% 1/6W
1-215-456-00	s	RES, METAL 30k 1% 1/6W
1-215-457-00	s	RES, METAL 33k 1% 1/6W
1-215-458-00	s	RES, METAL 36k 1% 1/6W
1-215-459-00	s	RES, METAL 39k 1% 1/6W
1-215-460-00	s	RES, METAL 43k 1% 1/6W
1-215-461-00	s	RES, METAL 47k 1% 1/6W
1-215-462-00	s	RES, METAL 51k 1% 1/6W
1-215-463-00	s	RES, METAL 56k 1% 1/6W
1-215-464-00	s	RES, METAL 62k 1% 1/6W
1-215-465-00	s	RES, METAL 68k 1% 1/6W
1-215-466-00	s	RES, METAL 75k 1% 1/6W
1-215-467-00	s	RES, METAL 82k 1% 1/6W
1-215-468-00	s	RES, METAL 91k 1% 1/6W
1-215-469-00	s	RES, METAL 100k 1% 1/6W
1-215-470-00	s	RES, METAL 110k 1% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-472-00	s	RES, METAL 130k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-474-00	s	RES, METAL 160k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-476-00	s	RES, METAL 200k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-478-00	s	RES, METAL 240k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-480-00	s	RES, METAL 300k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-482-00	s	RES, METAL 360k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-484-00	s	RES, METAL 430k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-486-00	s	RES, METAL 510k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-488-00	s	RES, METAL 620k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-490-00	s	RES, METAL 750k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-492-00	s	RES, METAL 910k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W



Part No.	SP	Description	
CONNECTOR			
1-564-001-11	o	RECEPTACLE	2P MALE (STRAIGHT TYPE)
1-564-012-11	o	RECEPTACLE	2P MALE (ANGLE TYPE)
1-562-147-11	o	HOUSING	2P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-002-11	o	RECEPTACLE	3P MALE (STRAIGHT TYPE)
1-564-013-11	o	RECEPTACLE	3P MALE (ANGLE TYPE)
1-562-148-11	o	HOUSING	3P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-003-11	o	RECEPTACLE	4P MALE (STRAIGHT TYPE)
1-564-014-11	o	RECEPTACLE	4P MALE (ANGLE TYPE)
1-562-149-11	o	HOUSING	4P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-004-11	o	RECEPTACLE	5P MALE (STRAIGHT TYPE)
1-564-015-11	o	RECEPTACLE	5P MALE (ANGLE TYPE)
1-562-150-11	o	HOUSING	5P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-005-11	o	RECEPTACLE	6P MALE (STRAIGHT TYPE)
1-564-016-11	o	RECEPTACLE	6P MALE (ANGLE TYPE)
1-562-151-11	o	HOUSING	6P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-006-11	o	RECEPTACLE	7P MALE (STRAIGHT TYPE)
1-564-017-11	o	RECEPTACLE	7P MALE (ANGLE TYPE)
1-562-152-11	o	HOUSING	7P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-007-11	o	RECEPTACLE	8P MALE (STRAIGHT TYPE)
1-564-018-11	o	RECEPTACLE	8P MALE (ANGLE TYPE)
1-562-153-11	o	HOUSING	8P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-008-41	o	RECEPTACLE	9P MALE (STRAIGHT TYPE)
1-564-019-11	o	RECEPTACLE	9P MALE (ANGLE TYPE)
1-562-154-11	o	HOUSING	9P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-009-11	o	RECEPTACLE	10P MALE (STRAIGHT TYPE)
1-564-020-11	o	RECEPTACLE	10P MALE (ANGLE TYPE)
1-562-155-11	o	HOUSING	10P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-010-21	o	RECEPTACLE	11P MALE (STRAIGHT TYPE)
1-564-021-11	o	RECEPTACLE	11P MALE (ANGLE TYPE)
1-562-156-11	o	HOUSING	11P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-011-11	o	RECEPTACLE	12P MALE (STRAIGHT TYPE)
1-564-022-11	o	RECEPTACLE	12P MALE (ANGLE TYPE)
1-562-157-11	o	HOUSING	12P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32

Part No.	SP	Description	
1-564-683-11	o	RECEPTACLE	13P MALE (STRAIGHT TYPE)
1-564-743-11	o	RECEPTACLE	13P MALE (ANGLE TYPE)
1-562-627-11	o	HOUSING	13P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-069-11	o	RECEPTACLE	14P MALE (STRAIGHT TYPE)
1-564-630-11	o	RECEPTACLE	14P MALE (ANGLE TYPE)
1-562-185-11	o	HOUSING	14P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-855-11	o	RECEPTACLE	15P MALE (STRAIGHT TYPE)
1-564-877-11	o	RECEPTACLE	15P MALE (ANGLE TYPE)
1-562-958-11	o	HOUSING	15P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32



Ref No.	Parts No.	SP	Description
AC-78 BOARD			
	1-622-704-11	o	PRINTED CIRCUIT BOARD, AC-78
⚠	1-533-189-11	o	HOLDER, FUSE
	1-533-189-11	o	HOLDER, FUSE
⚠C1	1-136-185-00	s	FILM 0.22 20% 250V
C2	1-161-741-00	s	CERAMIC 0.001 10% 400V
C3	1-161-741-00	s	CERAMIC 0.001 10% 400V
C4	1-161-741-00	s	CERAMIC 0.001 10% 400V
⚠CN950	1-564-241-00	o	PIN, 4P
	1-562-285-11	o	HOUSING, 4P
CN951	1-564-243-00	o	PIN, 6P
	1-562-287-11	o	HOUSING, 6P
CN952	1-564-242-00	o	PIN, 5P
	1-562-286-11	o	HOUSING, 5P
⚠F1	1-532-746-11	s	FUSE, GLASS TUBE 4A
⚠R1	1-214-937-00	s	CARBON 1M 5% 1/2W
AP-23 BOARD			
	A-6713-336-A	o	PRINTED CIRCUIT BOARD, AP-23
C3	1-162-207-31	s	CERAMIC 22PF 5% 50V
C22	1-162-207-31	s	CERAMIC 22PF 5% 50V
C26	1-162-286-31	s	CERAMIC 220PF 10% 50V
C103	1-162-207-31	s	CERAMIC 22PF 5% 50V
C122	1-162-207-31	s	CERAMIC 22PF 5% 50V
C126	1-162-286-31	s	CERAMIC 220PF 10% 50V
C202	1-126-103-11	s	ELECT 470 20% 16V
C205	1-126-103-11	s	ELECT 470 20% 16V
CN107	1-506-747-21	o	PIN, DIN (DIP) 64P
CP1	1-236-010-11	s	LOW PASS
CP2	1-236-010-11	s	LOW PASS
D1	8-719-200-02	s	10E2
D2	8-719-200-02	s	10E2
D3	8-719-901-33	s	1SS133
D4	8-719-901-33	s	1SS133
D101	8-719-200-02	s	10E2
D102	8-719-200-02	s	10E2
D103	8-719-901-33	s	1SS133
D104	8-719-901-33	s	1SS133
D201	8-719-109-59	s	RD2.7ES-B1
D202	8-719-110-06	s	RD8.2ES-B1
D203	8-719-109-88	s	RD5.6ES-B1

Ref No.	Parts No.	SP	Description
IC1	8-759-700-04	s	NJM2043D-D(JRC)
IC2	8-759-745-60	s	NJM4560D(JRC)
IC3	8-749-900-86	s	BX1469L(SONY)
IC4	8-759-745-60	s	NJM4560D(JRC)
IC101	8-759-700-04	s	NJM2043D-D(JRC)
IC102	8-759-745-60	s	NJM4560D(JRC)
IC103	8-749-900-86	s	BX1469L(SONY)
IC104	8-759-745-60	s	NJM4560D(JRC)
IC201	8-759-708-05	s	NJM78L05A(JRC)
IC202	8-759-700-65	s	NJM79L05A(JRC)
LV1	1-407-305-00	s	VAR, 22mH
LV2	1-459-434-00	s	VAR, COIL 22mH
LV101	1-407-305-00	s	VAR, 22mH
LV102	1-459-434-00	s	VAR, COIL 22mH
Q1	8-729-178-54	s	2SC2785
Q2	8-729-201-05	s	2SC2878-B
Q3	8-729-117-54	s	2SA1175
Q4	8-729-178-54	s	2SC2785
Q101	8-729-178-54	s	2SC2785
Q102	8-729-201-05	s	2SC2878-B
Q103	8-729-117-54	s	2SA1175
Q104	8-729-178-54	s	2SC2785
Q105	8-729-900-89	s	DTC144ES
Q201	8-729-113-32	s	2SB733
Q202	8-729-177-32	s	2SD773
Q203	8-729-178-54	s	2SC2785
Q204	8-729-117-54	s	2SA1175
R4	1-247-883-00	s	CARBON 150k 5% 1/4W
R9	1-247-885-00	s	CARBON 180k 5% 1/4W
R12	1-247-899-11	s	CARBON 680k 5% 1/4W
R39	1-247-883-00	s	CARBON 150k 5% 1/4W
R104	1-247-883-00	s	CARBON 150k 5% 1/4W
R109	1-247-885-00	s	CARBON 180k 5% 1/4W
R112	1-247-899-11	s	CARBON 680k 5% 1/4W
R139	1-247-883-00	s	CARBON 150k 5% 1/4W
RV1	1-228-998-00	s	VAR, CARBON 220k
RV2	1-228-993-00	s	VAR, CARBON 4.7k
RV3	1-228-996-00	s	VAR, CARBON 47k
RV4	1-228-993-00	s	VAR, CARBON 4.7k
RV5	1-228-991-00	s	VAR, CARBON 2.2k
RV101	1-228-998-00	s	VAR, CARBON 220k
RV102	1-228-993-00	s	VAR, CARBON 4.7k
RV103	1-228-996-00	s	VAR, CARBON 47k
RV104	1-228-993-00	s	VAR, CARBON 4.7k
RV105	1-228-991-00	s	VAR, CARBON 2.2k
T1	1-427-284-00	s	OUTPUT
T2	1-427-284-00	s	OUTPUT

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Ref No.	Parts No.	SP	Description
AU-85C BOARD			
	A-6713-334-A	o	MOUNTED CIRCUIT BOARD, AU-85C
C15	1-161-379-00	s	CERAMIC 0.01 30% 16V
C39	1-161-379-00	s	CERAMIC 0.01 30% 16V
C65	1-124-499-11	s	ELECT 1 20% 50V
C66	1-124-499-11	s	ELECT 1 20% 50V
C168	1-161-379-00	s	CERAMIC 0.01 30% 16V
C200	1-126-103-11	s	ELECT 470 20% 16V
C201	1-126-103-11	s	ELECT 470 20% 16V
CN109	1-506-747-21	o	PIN, DIN(DIP) 64P
D1	8-719-901-33	s	1SS133
D2	8-719-901-33	s	1SS133
D3	8-719-901-33	s	1SS133
D4	8-719-901-33	s	1SS133
D5	8-719-901-33	s	1SS133
D12	8-719-901-33	s	1SS133
D13	8-719-901-33	s	1SS133
D14	8-719-901-33	s	1SS133
IC1	8-759-205-76	s	TC504013BP(TOSHIBA)
IC2	8-759-132-40	s	UPC324C(NEC)
IC3	8-759-132-40	s	UPC324C(NEC)
IC4	8-759-969-13	s	SN16913P(TI)
IC5	8-759-969-13	s	SN16913P(TI)
IC6	8-759-969-13	s	SN16913P(TI)
IC7	8-759-969-13	s	SN16913P(TI)
IC8	8-759-132-40	s	UPC324C(NEC)
L1	1-459-155-00	s	(WITH CORE) 45
Q5	8-729-117-54	s	2SA1175
Q6	8-729-117-54	s	2SA1175
Q8	8-729-117-54	s	2SA1175
Q9	8-729-117-54	s	2SA1175
Q14	8-729-900-89	s	DTC144ES
Q146	8-729-178-54	s	2SC2785
R22	1-247-885-00	s	CARBON 180k 5% 1/6W
R24	1-247-895-00	s	CARBON 470k 5% 1/6W
R31	1-247-881-00	s	CARBON 120k 5% 1/6W
R43	1-247-885-00	s	CARBON 180k 5% 1/6W
R45	1-247-895-00	s	CARBON 470k 5% 1/6W
R70	1-247-887-00	s	CARBON 220k 5% 1/6W
R72	1-247-881-00	s	CARBON 120k 5% 1/6W
R75	1-247-881-00	s	CARBON 120k 5% 1/6W
R77	1-247-755-11	s	CARBON 1.8k 5% 1/2W
R84	1-247-887-00	s	CARBON 220k 5% 1/6W
R86	1-247-881-00	s	CARBON 120k 5% 1/6W

Ref No.	Parts No.	SP	Description
RV1	1-228-998-00	s	VAR, CARBON 220k
RV2	1-228-998-00	s	VAR, CARBON 220k
RV3	1-228-995-00	s	VAR, CARBON 22k
RV4	1-228-990-00	s	VAR, CARBON 1k
RV5	1-228-996-00	s	VAR, CARBON 47k
RV6	1-228-995-00	s	VAR, CARBON 22k
RV7	1-228-990-00	s	VAR, CARBON 1k
RV10	1-228-996-00	s	VAR, CARBON 47k
RV11	1-228-996-00	s	VAR, CARBON 47k
AU-87A BOARD			
	A-6713-335-A	o	MOUNTED CIRCUIT BOARD, AU-87
C101	1-124-284-00	s	ELECT 10 20% 16V
C102	1-162-207-31	s	CERAMIC 22PF 5% 50V
C105	1-124-284-00	s	ELECT 10 20% 16V
C106	1-162-207-31	s	CERAMIC 22PF 5% 50V
C108	1-162-207-31	s	CERAMIC 22PF 5% 50V
C113	1-162-282-31	s	CERAMIC 100PF 10% 50V
C203	1-161-379-00	s	CERAMIC 0.01 30% 16V
C209	1-161-379-00	s	CERAMIC 0.01 30% 16V
D101	8-719-901-33	s	1SS133
D102	8-719-901-33	s	1SS133
D103	8-719-200-02	s	10E-2
D104	8-719-200-02	s	10E-2
D105	8-719-901-33	s	1SS133
D106	8-719-901-33	s	1SS133
D107	8-719-901-33	s	1SS133
D108	8-719-901-33	s	1SS133
D109	8-719-109-88	s	RD5.6ES-B1
D201	8-719-110-06	s	RD8.2ES-B1
D203	8-719-110-12	s	RD9.1ES-B1
D204	8-719-110-12	s	RD9.1ES-B1
D205	8-719-109-59	s	RD2.7ES-B1
IC100	8-759-705-62	s	NJM4562D-D(JRC)
IC101	8-759-705-62	s	NJM4562D-D(JRC)
IC102	8-759-240-51	s	TC4051BP(TOSHIBA)
Q101	8-729-306-92	s	2SD669A
Q102	8-729-304-92	s	2SB649A
Q103	8-729-117-54	s	2SA1175
Q104	8-729-201-05	s	2SAC2878-B
Q105	8-729-306-92	s	2SD669A
Q106	8-729-304-92	s	2SB649A
Q107	8-729-201-05	s	2SC2878-B
Q108	8-729-117-54	s	2SA1175
Q109	8-729-306-92	s	2SD669A
Q110	8-729-304-92	s	2SB649A

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Ref No.	Parts No.	SP	Description
Q111	8-729-201-05	s	2SC2878-B
Q112	8-729-117-54	s	2SA1175
Q113	8-729-201-05	s	2SC2878-B
Q114	8-729-117-54	s	2SA1175
Q201	8-729-373-92	s	2SB739
Q202	8-729-378-84	s	2SD788
Q203	8-729-178-54	s	2SC2785
Q204	8-729-117-54	s	2SA1175
Q205	8-729-378-84	s	2SD788
Q206	8-729-373-92	s	2SB739
R108	1-247-727-11	s	CARBON 10 5% 1/2W
R109	1-247-727-11	s	CARBON 10 5% 1/2W
R120	1-247-727-11	s	CARBON 10 5% 1/2W
R121	1-247-727-11	s	CARBON 10 5% 1/2W
R131	1-247-727-11	s	CARBON 10 5% 1/2W
R132	1-247-727-11	s	CARBON 10 5% 1/2W
R202	1-247-764-11	s	CARBON 10k 5% 1/2W
R204	1-247-760-11	s	CARBON 4.7k 5% 1/2W
R205	1-247-745-11	s	CARBON 330 5% 1/2W
R208	1-247-764-11	s	CARBON 10k 5% 1/2W
R212	1-247-745-11	s	CARBON 330 5% 1/2W
RV1	1-228-993-00	s	VAR, CARBON 4.7k
RV2	1-228-993-00	s	VAR, CARBON 4.7k
RV3	1-228-995-00	s	VAR, CARBON 22k
T101	1-427-586-11	s	INPUT/OUTPUT
T102	1-427-586-11	s	INPUT/OUTPUT
T103	1-427-586-11	s	INPUT/OUTPUT

BC-11A BOARD

Ref No.	Parts No.	SP	Description
	A-6725-619-A	o	MOUNTED CIRCUIT BOARD, BC-11A
C105	1-161-379-00	s	CERAMIC 0.01 30% 16V
C106	1-162-282-31	s	CERAMIC 100PF 10% 50V
C123	1-161-379-00	s	CERAMIC 0.01 30% 16V
C124	1-161-379-00	s	CERAMIC 0.01 30% 16V
C402	1-161-379-00	s	CERAMIC 0.01 30% 16V
C405	1-102-116-00	s	CERAMIC 680PF 10% 50V
CN108	1-506-747-21	o	PIN, CIN(DIP) 64P
D101	8-719-101-97	s	1SS97-1
D102	8-719-101-97	s	1SS97-1
D105	8-719-901-33	s	1SS133
D402	8-719-901-33	s	1SS133
D403	8-719-901-33	s	1SS133
IC101	8-759-700-04	s	NJM2043D-D(JRC)
IC104	8-759-729-03	s	NJM2903D(JRC)
IC401	8-759-944-64	s	MB88525-179M(FUJITSU)
IC404	8-759-000-99	s	MC74HC74N(TOSHIBA)
Q102	8-729-178-54	s	2SC2785
Q103	8-729-178-54	s	2SC2785
Q104	8-729-201-05	s	2SC2878-B
Q105	8-729-178-54	s	2SC2785
Q106	8-729-178-54	s	2SC2785
Q107	8-729-178-54	s	2SC2785
Q108	8-729-900-65	s	DTA144ES
Q109	8-729-900-89	s	DTC144ES
Q111	8-729-178-54	s	2SC2785
Q115	8-729-117-54	s	2SA1175
Q116	8-729-178-54	s	2SC2785
Q407	8-729-900-89	s	DTC144ES
Q413	8-729-900-89	s	DTC144ES
Q414	8-729-900-89	s	DTC144ES
Q415	8-729-900-89	s	DTC144ES
Q416	8-729-178-54	s	2SC2785
Q420	8-729-900-89	s	DTC144ES
Q421	8-729-900-89	s	DTC144ES
Q422	8-729-900-89	s	DTC144ES
Q424	8-729-900-89	s	DTC144ES
Q427	8-729-900-74	s	DTC143TS
R430	1-247-903-00	s	CARBON 1M 5% 1/4W
RV101	1-228-996-00	s	VAR, CARBON 47k
X401	1-567-143-00	s	OSCILLATOR, CERAMIC 6MHz

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Ref No.	Parts No.	SP	Description
CC-31 BOARD			
	1-622-255-11	o	PRINTED CIRCUIT BOARD, CC-31
R1	1-247-705-11	s	CARBON 270 5% 1/4W
R2	1-247-717-11	s	CARBON 2.2K 5% 1/4W
R3	1-247-705-11	s	CARBON 270 5% 1/4W
R4	1-247-717-11	s	CARBON 2.2K 5% 1/4W
CC-32 BOARD			
	1-622-256-11	o	PRINTED CIRCUIT BOARD, CC-32
IC1	8-719-940-86	s	GP1L53(SHARP)
CC-33 BOARD			
	1-622-257-11	o	PRINTED CIRCUIT BOARD, CC-33
IC2	8-719-940-86	s	GP1L53(SHARP)
CP-109A BOARD			
	1-622-706-21	o	PRINTED CIRCUIT BOARD, CP-109
C1	1-124-236-00	s	ELECT 100 20% 10V
C3	1-124-584-00	s	ELECT 47 20% 16V
C4	1-124-584-00	s	ELECT 47 20% 16V
Q2	8-729-600-24	o	2SC403SP-51
S2	1-570-145-11	s	SLIDE "75 ohm ON/OFF"
S4	1-570-145-11	s	SLIDE "FRAMING"
S5	1-570-145-11	s	SLIDE "EXT TBC"

Ref No.	Parts No.	SP	Description
DM-54A BOARD			
	A-6710-956-A	o	MOUNTED CIRCUIT BOARD, DM-54A
C1	1-161-494-00	s	CERAMIC 0.022 30% 25V
C2	1-124-236-00	s	ELECT 47 20% 16V
C3	1-161-379-00	s	CERAMIC 0.01 30% 16V
C4	1-124-236-00	s	ELECT 47 20% 16V
C5	1-161-379-00	s	CERAMIC 0.01 30% 16V
C8	1-124-462-00	s	ELECT 10 20% 16V
C11	1-161-494-00	s	CERAMIC 0.022 30% 25V
C16	1-161-494-00	s	CERAMIC 0.022 30% 25V
C25	1-124-236-00	s	ELECT 47 20% 16V
C28	1-161-494-00	s	CERAMIC 0.022 30% 25V
C29	1-161-494-00	s	CERAMIC 0.022 30% 25V
C31	1-124-236-00	s	ELECT 47 20% 16V
C32	1-161-494-00	s	CERAMIC 0.022 30% 25V
C33	1-161-494-00	s	CERAMIC 0.022 30% 25V
C35	1-161-494-00	s	CERAMIC 0.022 30% 25V
C36	1-124-236-00	s	ELECT 47 20% 16V
C39	1-161-494-00	s	CERAMIC 0.022 30% 25V
C43	1-124-584-00	s	ELECT 100 20% 10V
C46	1-124-584-00	s	ELECT 100 20% 10V
C47	1-124-584-00	s	ELECT 100 20% 10V
C51	1-124-584-00	s	ELECT 100 20% 10V
C52	1-124-584-00	s	ELECT 100 20% 10V
C54	1-124-584-00	s	ELECT 100 20% 10V
C57	1-124-584-00	s	ELECT 100 20% 10V
C59	1-124-584-00	s	ELECT 100 20% 10V
C62	1-124-236-00	s	ELECT 47 20% 16V
C63	1-161-494-00	s	CERAMIC 0.022 30% 25V
C64	1-124-584-00	s	ELECT 100 20% 10V
C66	1-124-584-00	s	ELECT 100 20% 10V
C69	1-124-584-00	s	ELECT 100 20% 10V
C71	1-124-584-00	s	ELECT 100 20% 10V
C73	1-162-294-31	s	CERAMIC 0.001 10% 50V
C74	1-161-379-00	s	CERAMIC 0.01 30% 16V
C75	1-124-462-00	s	ELECT 10 20% 16V
C76	1-124-257-00	s	ELECT 2.2 20% 50V
C77	1-124-584-00	s	ELECT 100 20% 10V
C78	1-161-494-00	s	CERAMIC 0.022 30% 25V
C79	1-124-236-00	s	ELECT 47 20% 16V
C80	1-124-584-00	s	ELECT 100 20% 10V
C81	1-124-236-00	s	ELECT 47 20% 16V
C82	1-161-494-00	s	CERAMIC 0.022 30% 25V
C83	1-124-584-00	s	ELECT 100 20% 10V
C86	1-124-584-00	s	ELECT 100 20% 10V
C89	1-124-584-00	s	ELECT 100 20% 10V
C90	1-124-236-00	s	ELECT 47 20% 16V
C91	1-124-584-00	s	ELECT 100 20% 10V
C92	1-124-236-00	s	ELECT 47 20% 16V
C93	1-124-236-00	s	ELECT 47 20% 16V
C94	1-161-494-00	s	CERAMIC 0.022 30% 25V
C98	1-161-494-00	s	CERAMIC 0.022 30% 25V
C100	1-162-286-31	s	CERAMIC 220PF 10% 50V
C101	1-162-286-31	s	CERAMIC 220PF 10% 50V
C102	1-161-379-00	s	CERAMIC 0.01 30% 16V
C104	1-102-112-00	s	CERAMIC 330PF 10% 50V
C201	1-124-236-00	s	ELECT 47 20% 16V

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Ref No.	Parts No.	SP	Description			
C202	1-161-494-00	s	CERAMIC	0.022	30%	25V
C203	1-161-379-00	s	CERAMIC	0.01	30%	16V
C205	1-161-379-00	s	CERAMIC	0.01	30%	16V
C209	1-124-245-00	s	ELECT	4.7	20%	16V
C210	1-161-379-00	s	CERAMIC	0.01	30%	16V
C212	1-124-255-00	s	ELECT	1	20%	50V
C213	1-161-379-00	s	CERAMIC	0.01	30%	16V
C215	1-124-236-00	s	ELECT	47	20%	16V
C216	1-161-494-00	s	CERAMIC	0.022	30%	25V
C217	1-161-494-00	s	CERAMIC	0.022	30%	25V
C218	1-124-236-00	s	ELECT	47	20%	16V
C219	1-124-236-00	s	ELECT	47	20%	16V
C220	1-124-584-00	s	ELECT	100	20%	10V
C221	1-124-584-00	s	ELECT	100	20%	10V
C252	1-124-236-00	s	ELECT	47	20%	16V
C253	1-161-494-00	s	CERAMIC	0.022	30%	25V
C301	1-126-103-11	s	ELECT	470	20%	16V
C302	1-161-494-00	s	CERAMIC	0.022	30%	25V
C303	1-161-379-00	s	CERAMIC	0.01	30%	16V
C304	1-161-379-00	s	CERAMIC	0.01	30%	16V
C305	1-161-379-00	s	CERAMIC	0.01	30%	16V
C307	1-161-379-00	s	CERAMIC	0.01	30%	16V
C309	1-161-379-00	s	CERAMIC	0.01	30%	16V
C312	1-124-255-00	s	ELECT	1	20%	50V
C314	1-161-379-00	s	CERAMIC	0.01	30%	16V
C401	1-124-236-00	s	ELECT	47	20%	16V
C402	1-124-236-00	s	ELECT	47	20%	16V
C403	1-124-584-00	s	ELECT	100	20%	10V
C404	1-124-236-00	s	ELECT	47	20%	16V
C405	1-124-236-00	s	ELECT	47	20%	16V
C406	1-161-494-00	s	CERAMIC	0.022	30%	25V
C407	1-124-584-00	s	ELECT	100	20%	10V
C408	1-124-584-00	s	ELECT	100	20%	10V
C411	1-124-236-00	s	ELECT	47	20%	16V
C412	1-124-236-00	s	ELECT	47	20%	16V
C413	1-161-494-00	s	CERAMIC	0.022	30%	25V
C414	1-124-236-00	s	ELECT	47	20%	16V
C417	1-124-236-00	s	ELECT	47	20%	16V
C418	1-161-494-00	s	CERAMIC	0.022	30%	25V
C426	1-124-236-00	s	ELECT	47	20%	16V
C428	1-102-114-00	s	CERAMIC	470PF	10%	50V
C430	1-124-236-00	s	ELECT	47	20%	16V
C433	1-161-494-00	s	CERAMIC	0.022	30%	25V
C501	1-124-236-00	s	ELECT	47	20%	16V
C502	1-161-494-00	s	CERAMIC	0.022	30%	25V
C507	1-124-236-00	s	ELECT	47	20%	16V
C509	1-124-462-00	s	ELECT	10	20%	16V
C511	1-124-255-00	s	ELECT	1	20%	50V
C512	1-124-257-00	s	ELECT	2.2	20%	50V
C513	1-124-257-00	s	ELECT	2.2	20%	50V
C516	1-124-257-00	s	ELECT	2.2	20%	50V
C517	1-124-462-00	s	ELECT	10	20%	16V
C520	1-124-462-00	s	ELECT	10	20%	16V
C521	1-124-462-00	s	ELECT	10	20%	16V
C522	1-124-462-00	s	ELECT	10	20%	16V
C523	1-124-257-00	s	ELECT	2.2	20%	50V
C524	1-124-236-00	s	ELECT	47	20%	16V
C525	1-124-236-00	s	ELECT	47	20%	16V
C526	1-161-494-00	s	CERAMIC	0.022	30%	25V
C527	1-124-255-00	s	ELECT	1	20%	50V

Ref No.	Parts No.	SP	Description			
C529	1-124-462-00	s	ELECT	10	20%	16V
C531	1-124-255-00	s	ELECT	1	20%	50V
C532	1-124-255-00	s	ELECT	1	20%	50V
C533	1-124-236-00	s	ELECT	47	20%	16V
C534	1-161-494-00	s	CERAMIC	0.022	30%	25V
C535	1-124-462-00	s	ELECT	10	20%	16V
C537	1-124-462-00	s	ELECT	10	20%	16V
C538	1-124-462-00	s	ELECT	10	20%	16V
C543	1-124-236-00	s	ELECT	47	20%	16V
C544	1-161-494-00	s	CERAMIC	0.022	30%	25V
C547	1-124-462-00	s	ELECT	10	20%	16V
C548	1-124-236-00	s	ELECT	47	20%	16V
C549	1-161-494-00	s	CERAMIC	0.022	30%	25V
C550	1-161-379-00	s	CERAMIC	0.01	30%	16V
C552	1-161-379-00	s	CERAMIC	0.01	30%	16V
C553	1-161-379-00	s	CERAMIC	0.01	30%	16V
C554	1-161-494-00	s	CERAMIC	0.022	30%	25V
C557	1-161-494-00	s	CERAMIC	0.022	30%	25V
C558	1-161-494-00	s	CERAMIC	0.022	30%	25V
C559	1-161-494-00	s	CERAMIC	0.022	30%	25V
C561	1-124-236-00	s	ELECT	47	20%	16V
C562	1-161-494-00	s	CERAMIC	0.022	30%	25V
C563	1-124-236-00	s	ELECT	47	20%	16V
C564	1-124-236-00	s	ELECT	47	20%	16V
C566	1-124-462-00	s	ELECT	10	20%	16V
C570	1-124-255-00	s	ELECT	1	20%	50V
C571	1-161-494-00	s	CERAMIC	0.022	30%	25V
C572	1-124-236-00	s	ELECT	47	20%	16V
C573	1-124-462-00	s	ELECT	10	20%	16V
C574	1-101-890-00	s	CERAMIC	75PF	5%	50V
C575	1-124-236-00	s	ELECT	47	20%	16V
C576	1-161-494-00	s	CERAMIC	0.022	30%	25V
C578	1-161-494-00	s	CERAMIC	0.022	30%	25V
C580	1-124-236-00	s	ELECT	47	20%	16V
C582	1-161-494-00	s	CERAMIC	0.022	30%	25V
C583	1-162-294-31	s	CERAMIC	0.001	10%	50V
C587	1-161-494-00	s	CERAMIC	0.022	30%	25V
C588	1-124-236-00	s	ELECT	47	20%	16V
C591	1-124-236-00	s	ELECT	47	20%	16V
C592	1-161-494-00	s	CERAMIC	0.022	30%	25V
C595	1-124-236-00	s	ELECT	47	20%	16V
C596	1-161-494-00	s	CERAMIC	0.022	30%	25V
C601	1-124-255-00	s	ELECT	1	20%	50V
C602	1-161-494-00	s	CERAMIC	0.022	30%	25V
C604	1-124-236-00	s	ELECT	47	20%	16V
C605	1-161-494-00	s	CERAMIC	0.022	30%	25V
C606	1-161-494-00	s	CERAMIC	0.022	30%	25V
C607	1-161-494-00	s	CERAMIC	0.022	30%	25V
C608	1-161-494-00	s	CERAMIC	0.022	30%	25V
C609	1-161-494-00	s	CERAMIC	0.022	30%	25V

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
C610	1-124-236-00	s	ELECT 47 20% 16V
C611	1-161-494-00	s	CERAMIC 0.022 30% 25V
C613	1-124-255-00	s	ELECT 1 20% 50V
C616	1-124-462-00	s	ELECT 10 20% 16V
C617	1-161-494-00	s	CERAMIC 0.022 30% 25V
C618	1-124-236-00	s	ELECT 47 20% 16V
C619	1-161-494-00	s	CERAMIC 0.022 30% 25V
C620	1-124-462-00	s	ELECT 10 20% 16V
C621	1-123-321-00	s	ELECT 220 20% 16V
C622	1-124-236-00	s	ELECT 47 20% 16V
C623	1-161-494-00	s	CERAMIC 0.022 30% 25V
C625	1-124-462-00	s	ELECT 10 20% 16V
C626	1-124-462-00	s	ELECT 10 20% 16V
C627	1-124-462-00	s	ELECT 10 20% 16V
C628	1-124-462-00	s	ELECT 10 20% 16V
C629	1-161-379-00	s	CERAMIC 0.01 30% 16V
C630	1-161-379-00	s	CERAMIC 0.01 30% 16V
C631	1-161-379-00	s	CERAMIC 0.01 30% 16V
C632	1-161-379-00	s	CERAMIC 0.01 30% 16V
C633	1-161-494-00	s	CERAMIC 0.022 30% 25V
C634	1-161-494-00	s	CERAMIC 0.022 30% 25V
C635	1-124-236-00	s	ELECT 47 20% 16V
C636	1-161-494-00	s	CERAMIC 0.022 30% 25V
C638	1-124-462-00	s	ELECT 10 20% 16V
C639	1-124-462-00	s	ELECT 10 20% 16V
CN103	1-506-747-21	o	PIN, DIN (DIP) 64P
CN104	1-506-747-21	o	PIN, DIN (DIP) 64P
CV1	1-141-227-00	s	CAP, CERAMIC TRIMMER
CV2	1-141-227-00	s	CAP, CERAMIC TRIMMER
CV3	1-141-304-21	s	TRIMAR, CERAMIC
D1	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-109-70	s	RD3.9ESB
D251	8-719-911-19	s	1SS119
D301	8-719-101-97	s	1SS97-1
D302	8-719-101-97	s	1SS97-1
D303	8-719-911-19	s	1SS119
D304	8-719-104-10	s	1SS99
D305	8-719-911-19	s	1SS119
D401	8-719-911-19	s	1SS119
D402	8-719-911-19	s	1SS119
D403	8-719-110-11	s	RD9.1ES-B
D404	8-719-911-19	s	1SS119
D501	8-719-911-19	s	1SS119
D502	8-719-911-19	s	1SS119
D503	8-719-911-19	s	1SS119
D505	8-719-911-19	s	1SS119

Ref No.	Parts No.	SP	Description
D509	8-719-911-19	s	1SS119
D510	8-719-911-19	s	1SS119
D511	8-719-911-19	s	1SS119
D512	8-719-911-19	s	1SS119
D514	8-719-104-10	s	1SS99
D515	8-719-104-10	s	1SS99
D516	8-719-104-10	s	1SS99
D517	8-719-104-10	s	1SS99
D518	8-719-911-19	s	1SS119
D519	8-719-911-19	s	1SS119
D522	8-719-911-19	s	1SS119
D523	8-719-911-19	s	1SS119
DL1	1-415-162-21	s	50ns
DL2	1-415-154-00	s	35ns
DL3	1-415-452-21	s	810ns
DL4	1-415-545-11	s	350ns
DL502	1-415-402-11	s	300ns
DL504	1-415-544-11	s	450ns
DL506	1-415-402-11	s	300ns
FL1	1-235-623-11	s	HPF
FL2	1-231-581-21	s	HPF
FL3	1-235-469-11	s	LPF
FL4	1-235-475-12	s	LPF
FL201	1-235-469-11	s	LPF
FL501	1-235-617-11	s	LPF
FL502	1-235-048-21	s	LPF
FL503	1-235-619-11	s	BPF
FL504	1-235-618-21	s	BPF
IC1	8-751-340-10	s	CX-134A(SONY)
IC2	8-752-006-00	s	CX20060(SONY)
IC3	8-741-114-00	s	BX1140(SONY)
IC4	8-751-350-10	s	CX-135(SONY)
IC5	8-759-240-53	s	TC4053BP(TOSHIBA)
IC6	8-749-938-90	s	BX389(SONY)
IC7	8-741-124-90	s	BX1249(SONY)
IC8	8-741-124-90	s	BX1249(SONY)
IC9	8-759-145-58	s	UPC4558C(JRC)
IC10	8-752-006-00	s	CX20060(SONY)
IC11	8-759-400-06	s	AN608P(MATSUSHITA)
IC12	8-749-900-94	s	BX-1472(SONY)
IC201	8-759-207-38	s	TA7374P(TOSHIBA)
IC202	8-752-320-32	s	CXL5001P(SONY)
IC203	8-759-708-09	s	NJM78L09A(JRC)
IC204	8-749-938-90	s	BX389(SONY)
IC251	8-741-124-80	s	BX1248(SONY)
IC301	8-759-200-60	s	TA7060AP(TOSHIBA)
IC302	8-752-006-00	s	CX20060(SONY)
IC303	8-749-900-68	s	BX-1447L(SONY)

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
IC304	8-749-900-59	s	BX-1448L(SONY)
IC305	8-759-345-38	s	HD14538BP(HITACHI)
IC401	8-743-880-00	s	BX388(SONY)
IC402	8-752-006-00	s	CX20060(SONY)
IC403	8-759-240-53	s	TC4053BP(TOSHIBA)
IC404	8-749-900-63	s	BX365AL(ROHM)
IC405	8-749-901-03	s	BX366AL(ROHM)
IC406	8-749-900-63	s	BX365AL(ROHM)
IC407	8-749-901-03	s	BX366AL(ROHM)
IC408	8-759-201-47	s	TA7357AP(TOSHIBA)
IC501	8-741-124-70	s	BX1247(SONY)
IC502	8-752-006-00	s	CX20060(SONY)
IC503	8-749-938-90	s	BX389(SONY)
IC504	8-752-006-00	s	CX20060(SONY)
IC505	8-741-125-80	s	BX1258(SONY)
IC506	8-741-125-00	s	BX1250(SONY)
IC507	8-741-125-21	s	BX1252A(SONY)
IC508	8-741-126-40	s	BX1264(SONY)
IC509	8-752-006-00	s	CX20060(SONY)
IC510	8-759-014-96	s	MC1496P(MOTOROLA)
IC511	8-759-908-59	s	CX-859(SONY)
IC512	8-750-000-46	s	CX-872(SONY)
IC513	8-752-006-00	s	CX20060(SONY)
IC514	8-741-125-10	s	BX1251(SONY)
IC515	8-759-345-38	s	HD14538BP(HITACHI)
IC516	8-749-900-87	s	BX-1470L(SONY)
IC517	8-759-922-61	s	SN16913P-A(TI)
IC518	8-759-200-60	s	TA7060AP(TOSHIBA)
L1	1-410-482-31	s	MICRO 100
L2	1-410-087-31	s	MICRO 10mH
L3	1-410-471-11	s	MICRO 12
L4	1-410-471-11	s	MICRO 12
L5	1-410-087-31	s	MICRO 10mH
L7	1-410-473-11	s	MICRO 18
L9	1-410-092-31	s	MICRO 27mH
L10	1-410-461-41	s	MICRO 1.8
L15	1-410-482-31	s	MICRO 100
L16	1-410-482-31	s	MICRO 100
L17	1-410-482-31	s	MICRO 100
L18	1-410-473-11	s	MICRO 18
L19	1-410-476-11	s	MICRO 33
L22	1-410-482-31	s	MICRO 100
L23	1-410-482-31	s	MICRO 100
L24	1-410-482-31	s	MICRO 100
L25	1-410-473-11	s	MICRO 18
L26	1-410-087-31	s	MICRO 10mH
L28	1-410-482-31	s	MICRO 100
L201	1-410-482-31	s	MICRO 100
L202	1-410-482-31	s	MICRO 100
L252	1-410-482-31	s	MICRO 100
L301	1-410-482-31	s	MICRO 100
L401	1-410-482-31	s	MICRO 100
L402	1-410-482-31	s	MICRO 100
L403	1-410-482-31	s	MICRO 100
L404	1-410-482-31	s	MICRO 100
L501	1-410-482-31	s	MICRO 100
L502	1-410-482-31	s	MICRO 100
L504	1-410-482-31	s	MICRO 100

Ref No.	Parts No.	SP	Description
L506	1-410-482-31	s	MICRO 100
L507	1-410-482-31	s	MICRO 100
L508	1-410-482-31	s	MICRO 100
L509	1-410-482-31	s	MICRO 100
L510	1-410-478-11	s	MICRO 47
L512	1-410-482-31	s	MICRO 100
L513	1-410-482-31	s	MICRO 100
L514	1-410-482-31	s	MICRO 100
L516	1-410-482-31	s	MICRO 100
L517	1-410-482-31	s	MICRO 100
L518	1-410-482-31	s	MICRO 100
L519	1-410-482-31	s	MICRO 100
L520	1-410-482-31	s	MICRO 100
L521	1-410-482-31	s	MICRO 100
LV1	1-407-573-00	s	VAR, 47
LV301	1-407-569-00	s	VAR, 10
Q1	8-729-603-50	s	2SC403SP
Q2	8-729-603-50	s	2SC403SP
Q3	8-729-603-50	s	2SC403SP
Q5	8-729-900-89	s	DTC144ES
Q6	8-729-201-05	s	2SC2878-B
Q7	8-729-603-50	s	2SC403SP
Q8	8-729-603-50	s	2SC403SP
Q9	8-729-603-50	s	2SC403SP
Q10	8-729-901-42	s	2SC1740S-S
Q11	8-729-113-32	s	2SB733
Q13	8-729-603-50	s	2SC403SP
Q14	8-729-603-50	s	2SC403SP
Q15	8-729-900-89	s	DTC144ES
Q16	8-729-901-42	s	2SC1740S-S
Q17	8-729-603-50	s	2SC403SP
Q18	8-729-611-53	s	2SA1115-F
Q19	8-729-603-50	s	2SC403SP
Q20	8-729-603-50	s	2SC403SP
Q21	8-729-603-50	s	2SC403SP
Q22	8-729-603-50	s	2SC403SP
Q23	8-729-603-50	s	2SC403SP
Q24	8-729-603-50	s	2SC403SP
Q25	8-729-105-72	s	2SK523-L1
Q26	8-729-201-05	s	2SC2878-B
Q27	8-729-201-05	s	2SC2878-B
Q28	8-729-603-50	s	2SC403SP
Q29	8-729-611-53	s	2SA1115-F
Q30	8-729-603-50	s	2SC403SP
Q31	8-729-603-50	s	2SC403SP
Q32	8-729-603-50	s	2SC403SP
Q33	8-729-603-50	s	2SC403SP
Q34	8-729-603-50	s	2SC403SP
Q35	8-729-603-50	s	2SC403SP
Q36	8-729-603-50	s	2SC403SP
Q37	8-729-201-05	s	2SC2878-B

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
Q38	8-729-603-50	s	2SC403SP
Q39	8-729-603-50	s	2SC403SP
Q40	8-729-603-50	s	2SC403SP
Q41	8-729-603-50	s	2SC403SP
Q42	8-729-603-50	s	2SC403SP
Q43	8-729-900-89	s	DTC144ES
Q46	8-729-901-42	s	2SC1740S-S
Q48	8-729-201-05	s	2SC2878-B
Q49	8-729-603-50	s	2SC403SP
Q50	8-729-603-50	s	2SC403SP
Q201	8-729-603-50	s	2SC403SP
Q202	8-729-611-53	s	2SA1115-F
Q301	8-729-901-41	s	2SC1740S-R
Q302	8-729-901-42	s	2SC1740S-S
Q304	8-729-901-42	s	2SC1740S-S
Q305	8-729-901-42	s	2SC1740S-S
Q307	8-729-901-42	s	2SC1740S-S
Q308	8-729-900-89	s	DTC144ES
Q309	8-729-603-50	s	2SC403SP
Q401	8-729-900-89	s	DTC144ES
Q402	8-729-603-50	s	2SC403SP
Q403	8-729-201-05	s	2SC2878-B
Q404	8-729-201-05	s	2SC2878-B
Q405	8-729-603-50	s	2SC403SP
Q406	8-729-275-42	s	2SC2754-Y
Q407	8-729-275-42	s	2SC2754-Y
Q408	8-729-900-89	s	DTC144ES
Q409	8-729-611-53	s	2SA1115-F
Q410	8-729-611-53	s	2SA1115-F
Q411	8-729-611-53	s	2SA1115-F
Q412	8-729-611-53	s	2SA1115-F
Q413	8-729-900-89	s	DTC144ES
Q503	8-729-603-50	s	2SC403SP
Q504	8-729-603-50	s	2SC403SP
Q505	8-729-603-50	s	2SC403SP
Q506	8-729-901-42	s	2SC1740S-S
Q507	8-729-201-05	s	2SC2878-B
Q508	8-729-603-50	s	2SC403SP
Q509	8-729-603-50	s	2SC403SP
Q510	8-729-201-05	s	2SC2878-B
Q520	8-729-603-50	s	2SC403SP
Q521	8-729-900-89	s	DTC144ES
Q522	8-729-603-50	s	2SC403SP
Q523	8-729-201-05	s	2SC2878-B
Q524	8-729-201-05	s	2SC2878-B
Q526	8-729-901-42	s	2SC1740S-S
Q527	8-729-611-53	s	2SA1115-F
Q528	8-729-201-05	s	2SC2878-B
Q529	8-729-201-05	s	2SC2878-B
Q530	8-729-201-05	s	2SC2878-B



Ref No.	Parts No.	SP	Description
Q533	8-729-901-42	s	2SC1740S-S
Q534	8-729-901-42	s	2SC1740S-S
Q535	8-729-901-42	s	2SC1740S-S
Q536	8-729-603-50	s	2SC403SP
Q537	8-729-901-42	s	2SC1740S-S
Q538	8-729-901-42	s	2SC1740S-S
Q539	8-729-901-42	s	2SC1740S-S
Q540	8-729-901-42	s	2SC1740S-S
Q541	8-729-611-53	s	2SA1115-F
Q542	8-729-901-42	s	2SC1740S-S
Q543	8-729-901-42	s	2SC1740S-S
Q545	8-729-603-50	s	2SC403SP
Q546	8-729-603-50	s	2SC403SP
Q547	8-729-603-50	s	2SC403SP
Q548	8-729-603-50	s	2SC403SP
Q549	8-729-900-89	s	DTC144ES
Q550	8-729-603-50	s	2SC403SP
Q551	8-729-603-50	s	2SC403SP
Q553	8-729-900-89	s	DTC144ES
R97	1-247-887-00	s	CARBON 220k 5% 1/6W
R207	1-247-903-00	s	CARBON 1M 5% 1/4W
R442	1-247-883-00	s	CARBON 150k 5% 1/6W
R443	1-247-895-00	s	CARBON 470k 5% 1/6W
R609	1-247-901-11	s	CARBON 820k 5% 1/4W
R613	1-247-893-11	s	CARBON 390k 5% 1/4W
R623	1-247-885-00	s	CARBON 180k 5% 1/6W
RV1	1-228-990-00	s	VAR, CARBON 1k
RV2	1-228-990-00	s	VAR, CARBON 1k
RV3	1-228-990-00	s	VAR, CARBON 1k
RV4	1-228-991-00	s	VAR, CARBON 2.2k
RV5	1-228-991-00	s	VAR, CARBON 2.2k
RV6	1-228-991-00	s	VAR, CARBON 2.2k
RV8	1-228-995-00	s	VAR, CARBON 22k
RV9	1-228-991-00	s	VAR, CARBON 2.2k
RV10	1-228-991-00	s	VAR, CARBON 2.2k
RV11	1-228-991-00	s	VAR, CARBON 2.2k
RV12	1-228-991-00	s	VAR, CARBON 2.2k
RV13	1-228-995-00	s	VAR, CARBON 22k
RV14	1-228-991-00	s	VAR, CARBON 2.2k
RV15	1-228-990-00	s	VAR, CARBON 1k
RV16	1-228-991-00	s	VAR, CARBON 2.2k
RV201	1-228-989-00	s	VAR, CARBON 470
RV251	1-228-993-00	s	VAR, CARBON 4.7k
RV301	1-228-994-00	s	VAR, CARBON 10k
RV401	1-228-991-00	s	VAR, CARBON 2.2k
RV402	1-228-990-00	s	VAR, CARBON 1k

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
RV403	1-228-993-00	s	VAR, CARBON 4.7k
RV501	1-228-991-00	s	VAR, CARBON 2.2k
RV502	1-228-990-00	s	VAR, CARBON 1k
RV503	1-228-991-00	s	VAR, CARBON 2.2k
RV504	1-228-989-00	s	VAR, CARBON 470
RV505	1-228-993-00	s	VAR, CARBON 4.7k
RV506	1-228-995-00	s	VAR, CARBON 22k
RV507	1-228-994-00	s	VAR, CARBON 10k
RV508	1-228-994-00	s	VAR, CARBON 10k
RV509	1-228-995-00	s	VAR, CARBON 22k
RV510	1-228-994-00	s	VAR, CARBON 10k
RV511	1-228-993-00	s	VAR, CARBON 4.7k
RV513	1-228-991-00	s	VAR, CARBON 2.2k
RV514	1-228-991-00	s	VAR, CARBON 2.2k
RV515	1-228-991-00	s	VAR, CARBON 2.2k
RV516	1-228-990-00	s	VAR, CARBON 1k
RV517	1-228-990-00	s	VAR, CARBON 1k
RV518	1-228-993-00	s	VAR, CARBON 4.7k
RV519	1-228-995-00	s	VAR, CARBON 22k
RV520	1-228-995-00	s	VAR, CARBON 22k
RV521	1-228-991-00	s	VAR, CARBON 2.2k
RV522	1-228-993-00	s	VAR, CARBON 4.7k
RV523	1-228-991-00	s	VAR, CARBON 2.2k
RV524	1-228-990-00	s	VAR, CARBON 1k
S301	1-552-509-00	s	DIP
S501	1-552-509-00	s	DIP
T501	1-425-785-21	s	TRANSFORMER,BURST AMP(BAT)
TH1	1-800-200-00	s	THERMISTOR S-3K
TH501	1-800-200-00	s	THERMISTOR S-3K
TH502	1-800-200-00	s	THERMISTOR S-3K
X501	1-527-376-00	s	CRYSTAL 3.579545MHz

DP-62 BOARD

Ref No.	Parts No.	SP	Description
D201	8-719-942-19	s	LB-402VK
D202	8-719-942-19	s	LB-402VK
D203	8-719-942-19	s	LB-402VK
D204	8-719-942-19	s	LB-402VK
S202	1-552-539-00	s	KEY BOARD "RESET"

DR-53 BOARD

This board includes the DR-59 board.

Ref No.	Parts No.	SP	Description
	A-6715-367-A	o	MOUNTED CIRCUIT BOARD, DR-53
C9	1-102-121-00	s	CERAMIC 0.0022 10% 50V
C10	1-102-121-00	s	CERAMIC 0.0022 10% 50V
C11	1-102-121-00	s	CERAMIC 0.0022 10% 50V
C12	1-102-121-00	s	CERAMIC 0.0022 10% 50V
CN1	1-566-096-11	s	PIN, BOARD TO BOARD 12P (DR-53 to DR-59)
CN806	1-508-900-00	s	(M) 2P
D1	8-719-911-55	s	U05G
D2	8-719-200-02	s	10E-2
D3	8-719-200-02	s	10E-2
D4	8-719-200-02	s	10E-2
⚠ **PS1**	**1-532-686-00**	s	**LINK, IC**
PS2	**1-532-686-00**	s	**LINK, IC**
Q1	8-729-114-11	s	2SA1141
Q2	8-729-102-57	s	2SC3012
Q3	8-729-114-11	s	2SA1141
Q4	8-729-102-57	s	2SC3012
Q5	8-729-177-42	s	2SD774-3
Q6	8-729-377-12	s	2SA771
Q7	8-729-377-12	s	2SA771
Q8	8-729-177-42	s	2SD774-3
Q9	8-729-377-12	s	2SA771
Q10	8-729-377-12	s	2SA771
R2	1-217-156-00	s	VAR, METAL PLATE 0.22
R4	1-217-156-00	s	VAR, METAL PLATE 0.22
R5	1-247-887-00	s	CARBON 220k 5% 1/6W
R6	1-207-620-00	s	WIREWOUND 1 10% 3W
R7	1-247-887-00	s	CARBON 220k 5% 1/6W
R8	1-207-620-00	s	WIREWOUND 1 10% 3W
RV1	1-228-989-00	s	VAR, CARBON 470
RV2	1-228-989-00	s	VAR, CARBON 470

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No. Parts No. SP Description

DR-59 BOARD

Ref No.	Parts No.	SP	Description
Q101	8-729-177-42	s	2SB774
Q102	8-729-103-43	s	2SB734
Q103	8-729-177-42	s	2SB774
Q104	8-729-103-43	s	2SB734
R101	1-247-887-00	s	CARBON 220k 5% 1/6W
R102	1-247-741-11	s	CARBON 150 5% 1/2W
R103	1-215-914-11	s	WIREWOUND 330 10% 3W
R104	1-207-628-00	s	WIREWOUND 10 10% 3W
R105	1-247-887-00	s	CARBON 220k 5% 1/6W
R106	1-247-741-11	s	CARBON 150 5% 1/2W
R107	1-215-914-11	s	WIREWOUND 330 10% 3W
R108	1-207-628-00	s	WIREWOUND 10 10% 3W

DUS-92 BOARD

Ref No.	Parts No.	SP	Description
	1-615-924-11	o	PRINTED CIRCUIT BOARD, DUS-92

DUS-147 BOARD

Ref No.	Parts No.	SP	Description
	1-622-261-11	o	PRINTED CIRCUIT BOARD, DUS-147

DUS-177 BOARD

Ref No.	Parts No.	SP	Description
	1-622-715-11	o	PRINTED CIRCUIT BOARD, DUS-177

DUS-178 BOARD

Ref No.	Parts No.	SP	Description
	1-622-716-11	o	PRINTED CIRCUIT BOARD, DUS-178

EX-127 BOARD

Ref No.	Parts No.	SP	Description
	A-6729-494-A	s	MOUNTED CIRCUIT BOARD, EX-127
CN1	1-506-747-21	o	PIN, DIN (DIP) 64P
CN2	1-563-340-21	o	HOUSING, (DIP) 64P

Ref No. Parts No. SP Description

EX-128 BOARD

Ref No.	Parts No.	SP	Description
	A-6729-495-A	s	MOUNTED CIRCUIT BOARD, EX-128
CN1	1-506-747-21	o	PIN, DIN (DIP) 64P
CN2	1-563-340-21	o	HOUSING, (DIP) 64P
CN3	1-506-747-21	o	PIN, DIN (DIP) 64P
CN4	1-563-340-21	o	HOUSING, (DIP) 64P

HN-80A BOARD

Ref No.	Parts No.	SP	Description
	1-622-725-11	o	PRINTED CIRCUIT BOARD, HN-80
C1	1-161-379-00	s	CERAMIC 0.01 30% 16V
C2	1-161-379-00	s	CERAMIC 0.01 30% 16V
C3	1-161-379-00	s	CERAMIC 0.01 30% 16V
CN227	1-566-508-11	o	PLUG, (PCB-PCB) 20P
CN228	1-566-508-11	o	PLUG, (PCB-PCB) 20P
D1	8-719-200-02	s	10E-2
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D5	8-719-200-02	s	10E-2
D6	8-719-200-02	s	10E-2
IC1	8-759-600-24	s	M54543L(MITSUBISHI)
⚠PS1	1-532-686-00	s	LINK, IC

HN-83 BOARD

Ref No.	Parts No.	SP	Description
	1-622-719-11	o	PRINTED CIRCUIT BOARD, HN-83

HN-84 BOARD

Ref No.	Parts No.	SP	Description
	1-622-726-11	o	PRINTED CIRCUIT BOARD, HN-84

HP-28 BOARD

Ref No.	Parts No.	SP	Description
	1-622-730-11	o	PRINTED CIRCUIT BOARD, HP-28
C21	1-161-379-00	s	CERAMIC 0.01 30% 16V

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
KY-144A BOARD			
This board includes the DP-62 board.			
	A-6717-496-A	o	MOUNTED CIRCUIT BOARD, KY-144A
BT1	1-528-229-11	o	BATTERY, LITHIUM (CR-2450)
C2	1-162-211-21	s	CERAMIC 33PF 5% 50V
C3	1-162-211-21	s	CERAMIC 33PF 5% 50V
C8	1-125-443-11	s	DOUBLE LAYERS 0.047F 5.5V
C9	1-124-245-00	s	ELECT 4.7 20% 16V
C10	1-161-379-00	s	CERAMIC 0.01 30% 16V
C12	1-162-211-21	s	CERAMIC 33PF 5% 50V
C13	1-162-211-21	s	CERAMIC 33PF 5% 50V
C17	1-124-245-00	s	ELECT 4.7 20% 16V
CN1	1-506-696-11	o	HEADER 10P
CN3	1-557-237-11	o	WIRE, FLAT TYPE 23P (KY-144A to DP-62)
D10	8-719-911-19	s	1SS119
D11	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-911-19	s	1SS119
D17	8-719-911-19	s	1SS119
D18	8-719-911-19	s	1SS119
D19	8-719-911-19	s	1SS119
D22	8-719-911-19	s	1SS119
D23	8-719-911-19	s	1SS119
D24	8-719-911-19	s	1SS119
D38	8-719-904-55	s	GL-5HD5
D39	8-719-800-86	s	TLG255
D40	8-719-800-86	s	TLG255
D41	8-719-904-55	s	GL-5HD5
D42	8-719-904-55	s	GL-5HD5
D45	8-719-911-19	s	1SS119
D46	8-719-911-19	s	1SS119
D48	8-719-200-02	s	10E-2
D49	8-719-911-19	s	1SS119
D50	8-719-200-02	s	10E-2
D51	8-719-911-19	s	1SS119
D52	8-719-911-19	s	1SS119
D53	8-719-802-11	s	TLUG154
D54	8-719-911-19	s	1SS119
D55	8-719-911-19	s	1SS119

Ref No.	Parts No.	SP	Description
IC1	8-759-605-23	s	M50747H-601SP(MITSUBISHI)
IC2	8-759-645-16	s	M54516P(MITSUBISHI)
IC3	8-759-645-16	s	M54516P(MITSUBISHI)
IC4	8-759-645-16	s	M54516P(MITSUBISHI)
IC5	8-759-600-68	s	M54562P(MITSUBISHI)
IC6	8-759-171-05	s	UPC7805H(NEC)
IC7	8-759-937-29	s	MB88201H-539N(FUJITSU)
IC101	8-759-600-61	s	M54529AP(MITSUBISHI)
IC102	8-759-600-61	s	M54529AP(MITSUBISHI)
Q2	8-729-900-67	s	DTA124XS
Q3	8-729-900-67	s	DTA124XS
Q4	8-729-900-67	s	DTA124XS
Q5	8-729-275-42	s	2SC2754-Y
Q6	8-729-275-42	s	2SC2754-Y
Q8	8-729-117-54	s	2SA1175
Q9	8-729-117-54	s	2SA1175
Q10	8-729-117-54	s	2SA1175
Q11	8-729-117-54	s	2SA1175
Q12	8-729-117-54	s	2SA1175
Q13	8-729-117-54	s	2SA1175
Q14	8-729-117-54	s	2SA1175
Q15	8-729-900-89	s	DTC144ES
Q101	8-729-117-54	s	2SA1175
Q102	8-729-117-54	s	2SA1175
Q105	8-729-117-54	s	2SA1175
Q106	8-729-117-54	s	2SA1175
Q107	8-729-117-54	s	2SA1175
Q108	8-729-117-54	s	2SA1175
Q109	8-729-117-54	s	2SA1175
R32	1-247-903-91	s	CARBON 1M 5% 1/4W
S10	1-571-167-11	s	TACTIL "STANBY"
S11	1-571-167-11	s	TACTIL "PREROLL"
S14	1-552-539-00	s	KEY BOARD "SEARCH"
S15	1-571-169-11	s	TACTIL "EJECT"
S16	1-571-167-31	s	TACTIL "REW"
S17	1-571-167-21	s	TACTIL "PLAY"
S18	1-571-167-41	s	TACTIL "F FWD"
S19	1-571-169-21	s	TACTIL "STOP"
S23	1-552-539-00	s	KEY BOARD "PLAYER"
S24	1-552-539-00	s	KEY BOARD "RECORDER"
S28	1-516-995-00	s	LEVER SLIDE "DATA"
S29	1-552-539-00	s	KEY BOARD "SET"
X1	1-567-869-11	s	VIBRATOR, CERAMIC 9.83MHz
X2	1-567-192-11	s	OSCILLATOR, CERAMIC 4MHz

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description

LE-53 BOARD

Ref No.	Parts No.	SP	Description
	1-622-720-11	o	PRINTED CIRCUIT BOARD, LE-53
D1	8-719-930-20	o	HLMP-1302

LE-54 BOARD

Ref No.	Parts No.	SP	Description
	1-622-717-11	o	PRINTED CIRCUIT BOARD, LE-54
D1	8-719-930-20	s	HLMP-1302

LM-13 BOARD

Ref No.	Parts No.	SP	Description
	1-618-600-11	o	PRINTED CIRCUIT BOARD, LM-13
C1	1-130-471-00	s	PE TEREPHTHALATE 0.001
C2	1-130-471-00	s	PE TEREPHTHALATE 0.001

LP-41 BOARD

Ref No.	Parts No.	SP	Description
	1-623-101-11	o	PRINTED CIRCUIT BOARD, LP-41
D1	8-719-800-89	s	TLY255
D2	8-719-800-89	s	TLY255
D3	8-719-800-89	s	TLY255
R1	1-247-706-11	s	CARBON 330 5% 1/4W
R2	1-247-706-11	s	CARBON 330 5% 1/4W
R3	1-247-706-11	s	CARBON 330 5% 1/4W

MB-127A BOARD

This board includes the MB-139 board.

Ref No.	Parts No.	SP	Description
	A-6729-731-A	o	MOUNTED CIRCUIT BOARD, MB-127A
CN101	1-563-336-21	o	HOUSING, (DIP) 64P
CN102	1-563-336-21	o	HOUSING, (DIP) 64P
CN103	1-563-336-21	o	HOUSING, (DIP) 64P
CN104	1-563-336-21	o	HOUSING, (DIP) 64P
CN105	1-563-336-21	o	HOUSING, (DIP) 64P
CN106	1-563-336-21	o	HOUSING, (DIP) 64P
CN107	1-563-336-21	o	HOUSING, (DIP) 64P
CN108	1-563-336-21	o	HOUSING, (DIP) 64P
CN109	1-563-336-21	o	HOUSING, (DIP) 64P
CN110	1-566-313-11	o	PIN, 7P
	1-562-883-11	o	HOUSING, 7P
CN111	1-564-607-11	o	PIN, 6P
	1-562-287-11	o	HOUSING, 6P
CN227	1-563-994-11	o	SOCKET, (PCB-PCB)20P
CN228	1-563-994-11	o	SOCKET, (PCB-PCB)20P
CN231	1-563-994-11	o	SOCKET, (PCB-PCB)20P
CN232	1-563-994-11	o	SOCKET, (PCB-PCB)20P
CN233	1-563-994-11	o	SOCKET, (PCB-PCB)20P

MB-139 BOARD

All of the component parts on the MB-139 board are supplied together when you order MB-127A board.

Ref No.	Parts No.	SP	Description
	1-622-714-11	o	PRINTED CIRCUIT BOARD, MB-139
CN230	1-563-336-21	o	HOUSING, (DIP) 64P
CN241	1-566-508-11	o	PLUG, (PCB-PCB) 20P
CN242	1-566-508-11	o	PLUG, (PCB-PCB) 20P
CN243	1-566-508-11	o	PLUG, (PCB-PCB) 20P

MT-28 BOARD

Ref No.	Parts No.	SP	Description
	1-622-729-11	o	PRINTED CIRCUIT BOARD, MT-28
CN335	1-560-035-00	s	PIN, BOARD TO BOARD 5P (MT-28 to VR-48)
CN336	1-560-035-00	s	PIN, BOARD TO BOARD 5P (MT-28 to VR-48)
D1	8-719-800-89	s	TLY255
D2	8-719-800-86	s	TLG255
D3	8-719-800-89	s	TLY255
D4	8-719-800-89	s	TLY255
D5	8-719-800-89	s	TLY255
D6	8-719-800-89	s	TLY255
R1	1-247-706-11	s	CARBON 330 5% 1/4W
R2	1-247-706-11	s	CARBON 330 5% 1/4W
R3	1-247-706-11	s	CARBON 330 5% 1/4W

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
PD-45 BOARD			
	A-6717-495-A	o	MOUNTED CIRCUIT BOARD, PD-45
C1	1-161-379-00	s	CERAMIC 0.01 30% 16V
C2	1-161-379-00	s	CERAMIC 0.01 30% 16V
C3	1-161-379-00	s	CERAMIC 0.01 30% 16V
C4	1-124-259-00	s	ELECT 4.7 20% 50V
C5	1-124-259-00	s	ELECT 4.7 20% 50V
C6	1-124-259-00	s	ELECT 4.7 20% 50V
C101	1-124-255-00	s	ELECT 1 20% 50V
C102	1-124-255-00	s	ELECT 1 20% 50V
C103	1-124-255-00	s	ELECT 1 20% 50V
C104	1-124-236-00	s	ELECT 47 20% 50V
C107	1-124-255-00	s	ELECT 1 20% 50V
C108	1-124-255-00	s	ELECT 1 20% 50V
C109	1-124-255-00	s	ELECT 1 20% 50V
C110	1-124-236-00	s	ELECT 47 20% 50V
D1	8-719-200-02	s	10E-2
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-200-02	s	10E-2
D5	8-719-200-02	s	10E-2
D6	8-719-200-02	s	10E-2
D7	8-719-200-02	s	10E-2
D8	8-719-200-02	s	10E-2
D9	8-719-200-02	s	10E-2
D10	8-719-200-02	s	10E-2
D11	8-719-200-02	s	10E-2
D12	8-719-200-02	s	10E-2
D13	8-719-200-02	s	10E-2
D14	8-719-200-02	s	10E-2
IC1	8-759-600-24	s	M54543L(MITSUBISHI)
IC101	8-752-006-00	s	CX20060(SONY)
IC102	8-752-006-00	s	CX20060(SONY)
IC103	8-741-126-50	s	BX1265(SONY)
IC104	8-741-126-50	s	BX1265(SONY)
L101	1-410-482-31	s	MICRO 100
L102	1-410-482-31	s	MICRO 100
⚠PS1	1-532-686-00	s	LINK
PS2	1-532-685-00	s	LINK
PS3	1-532-685-00	s	LINK
PS4	1-532-685-00	s	LINK
Q1	8-729-811-11	s	2SD1111
Q2	8-729-178-55	s	2SC2785-E
Q3	8-729-178-55	s	2SC2785-E
Q4	8-729-199-82	s	2SD998
Q5	8-729-811-11	s	2SD1111
Q6	8-729-178-55	s	2SC2785-E
Q7	8-729-889-40	s	2SD894
Q8	8-729-811-11	s	2SD1111
Q9	8-729-178-55	s	2SC2785-E
Q10	8-729-889-40	s	2SD894
RV101	1-228-991-00	s	VAR, VARBON 2.2k
RV102	1-228-991-00	s	VAR, VARBON 2.2k
T101	1-426-319-11	s	PB RF
T102	1-426-319-11	s	PB RF
PH-5(A) BOARD			
	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5(A)
D1	8-719-951-04	s	BR5104S
PH-5(B) BOARD			
	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5(B)
Q1	8-729-810-21	s	SPS102-A
PH-5(C) BOARD			
	1-603-737-00	o	PRINTED CIRCUIT BOARD, PH-5(C)
D1	8-719-951-04	s	BR5104S
PTC-26 BOARD			
	1-622-721-11	o	PRINTED CIRCUIT BOARD, PTC-26
Q1	8-729-810-22	s	SPS102-A



Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
PTC-28 BOARD			
	1-622-722-11	o	PRINTED CIRCUIT BOARD, PTC-28
PC1	1-806-232-11	s	MB-1102/S.N
PTC-29 BOARD			
	1-622-718-11	o	PRINTED CIRCUIT BOARD, PTC-29
PC2	1-806-232-21	s	MB-1102/S.N
PTC-30 BOARD			
	1-622-260-11	o	PRINTED CIRCUIT BOARD, PTC-30
IC2	8-719-939-50	s	GP1L52(SHARP)
IC3	8-719-939-50	s	GP1L52(SHARP)
PTC-32 BOARD			
	1-622-638-11	o	PRINTED CIRCUIT BOARD, PTC-32
C1	1-124-234-00	s	ELECT 22 20% 10V
IC1	8-719-939-50	s	GP1L52(SHARP)
IC2	8-719-939-50	s	GP1L52(SHARP)
IC3	8-719-940-86	s	GP1L53(SHARP)
IC4	8-719-939-50	s	GP1L52(SHARP)
IC5	8-759-133-90	s	UPC339C(NEC)
PTC-33 BOARD			
	1-622-258-11	o	PRINTED CIRCUIT BOARD, PTC-33
IC1	8-719-940-86	s	GP1L53(SHARP)
IC2	8-719-940-86	s	GP1L53(SHARP)
PTC-34 BOARD			
	1-622-259-11	o	PRINTED CIRCUIT BOARD, PTC-34
IC1	8-719-940-86	s	GP1L53(SHARP)

Ref No.	Parts No.	SP	Description
RM-44 BOARD			
	1-622-739-11	o	PRINTED CIRCUIT BOARD, RM-44
C1	1-161-379-00	s	CERAMIC 0.01 30% 16V
CN1	1-566-658-11		24P "REMOTE 2"
CN2	1-563-890-11	s	SOCKET, D-SUB 9P "REMOTE 1"
IC1	8-759-201-34	s	TD62503P(TOSHIBA)
RM-45 BOARD			
	1-622-740-11	o	PRINTED CIRCUIT BOARD, RM-45
SE-48 BOARD			
	A-6729-496-A	o	MOUNTED CIRCUIT BOARD, SE-48
C2	1-162-294-31	s	CERAMIC 0.001 10% 50V
C3	1-162-207-31	s	CERAMIC 22PF 5% 50V
C5	1-162-294-31	s	CERAMIC 0.001 10% 50V
C6	1-162-207-31	s	CERAMIC 22PF 5% 50V
C8	1-162-294-31	s	CERAMIC 0.001 10% 50V
C9	1-162-207-31	s	CERAMIC 22PF 5% 50V
C11	1-162-294-31	s	CERAMIC 0.001 10% 50V
C12	1-162-207-31	s	CERAMIC 22PF 5% 50V
C14	1-161-379-00	s	CERAMIC 0.01 30% 16V
IC1	8-759-132-40	s	UPC324C(NEC)
IC2	8-749-211-00	s	DM-211
IC3	8-749-211-00	s	DM-211
R4	1-247-895-00	s	CARBON 470k 5% 1/6W
R8	1-247-895-00	s	CARBON 470k 5% 1/6W
R12	1-247-895-00	s	CARBON 470k 5% 1/6W
R16	1-247-895-00	s	CARBON 470k 5% 1/6W
RV1	1-228-993-00	s	VAR, CARBON 4.7K
RV2	1-228-993-00	s	VAR, CARBON 4.7K
RV3	1-228-993-00	s	VAR, CARBON 4.7K
RV4	1-228-993-00	s	VAR, CARBON 4.7k

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description			

SV-88C BOARD

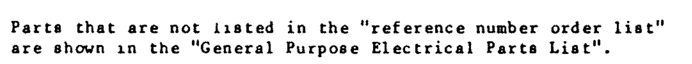
Ref No.	Parts No.	SP	Description			
	A-6715-408-A	o	MOUNTED CIRCUIT BOARD, SV-88C			
C104	1-162-290-31	s	CERAMIC	470PF	10%	50V
C105	1-124-234-00	s	ELECT	22	20%	16V
C106	1-124-234-00	s	ELECT	22	20%	16V
C108	1-124-234-00	s	ELECT	22	20%	16V
C109	1-124-465-00	s	ELECT	0.47	20%	50V
C111	1-162-286-31	s	CERAMIC	220PF	10%	50V
C116	1-162-288-31	s	CERAMIC	330PF	10%	50V
C117	1-162-286-31	s	CERAMIC	220PF	10%	50V
C121	1-162-288-31	s	CERAMIC	330PF	10%	50V
C132	1-162-282-31	s	CERAMIC	100PF	10%	50V
C139	1-162-294-31	s	CERAMIC	0.001	10%	50V
C140	1-162-294-31	s	CERAMIC	0.001	10%	50V
C201	1-124-462-00	s	ELECT	10	20%	16V
C202	1-124-234-00	s	ELECT	22	20%	16V
C210	1-162-290-31	s	CERAMIC	470PF	10%	50V
C213	1-162-282-31	s	CERAMIC	100PF	10%	50V
C215	1-162-290-31	s	CERAMIC	470PF	10%	50V
C219	1-161-494-00	s	CERAMIC	0.022	30%	25V
C401	1-123-611-00	s	ELECT	1	20%	50V
C402	1-123-611-00	s	ELECT	1	20%	50V
C403	1-124-462-00	s	ELECT	10	20%	16V
C404	1-124-462-00	s	ELECT	10	20%	16V
C405	1-161-494-00	s	CERAMIC	0.022	30%	25V
C406	1-162-294-31	s	CERAMIC	0.001	10%	50V
C407	1-162-294-31	s	CERAMIC	0.001	10%	50V
C408	1-162-294-31	s	CERAMIC	0.001	10%	50V
C409	1-162-294-31	s	CERAMIC	0.001	10%	50V
C410	1-161-494-00	s	CERAMIC	0.022	30%	25V
C412	1-124-234-00	s	ELECT	22	20%	16V
C415	1-124-234-00	s	ELECT	22	20%	16V
C418	1-124-462-00	s	ELECT	10	20%	16V
C419	1-124-462-00	s	ELECT	10	20%	16V
C430	1-161-377-00	s	CERAMIC	0.0047	30%	16V
C431	1-161-377-00	s	CERAMIC	0.0047	30%	16V
C432	1-161-377-00	s	CERAMIC	0.0047	30%	16V
C433	1-161-494-00	s	CERAMIC	0.022	30%	25V
C504	1-124-462-00	s	ELECT	10	20%	16V
C507	1-124-462-00	s	ELECT	10	20%	16V
C508	1-130-728-00	s	FILM	0.0022	5%	50V
C510	1-162-282-31	s	CERAMIC	100PF	10%	50V
C515	1-162-282-31	s	CERAMIC	100PF	10%	50V
C519	1-123-611-00	s	ELECT	1	20%	50V
C520	1-124-462-00	s	ELECT	10	20%	16V
C521	1-162-213-31	s	CERAMIC	39PF	5%	50V
C523	1-162-290-31	s	CERAMIC	470PF	10%	50V
C525	1-123-611-00	s	ELECT	1	20%	50V
C526	1-124-462-00	s	ELECT	10	20%	16V
C527	1-162-213-31	s	CERAMIC	39PF	5%	50V
C529	1-162-290-31	s	CERAMIC	470PF	10%	50V
C531	1-123-611-00	s	ELECT	1	20%	50V
C532	1-124-462-00	s	ELECT	10	20%	16V
C533	1-162-213-31	s	CERAMIC	39PF	5%	50V
C535	1-162-290-31	s	CERAMIC	470PF	10%	50V
C539	1-123-611-00	s	ELECT	1	20%	50V
C540	1-123-611-00	s	ELECT	1	20%	50V

Ref No.	Parts No.	SP	Description			
C541	1-162-282-31	s	CERAMIC	100PF	10%	50V
C545	1-130-728-00	s	FILM	0.0022	5%	50V
C551	1-161-494-00	s	CERAMIC	0.022	30%	25V
C601	1-162-282-31	s	CERAMIC	100PF	10%	50V
C602	1-162-282-31	s	CERAMIC	100PF	10%	50V
C603	1-162-282-31	s	CERAMIC	100PF	10%	50V
C604	1-162-282-31	s	CERAMIC	100PF	10%	50V
C606	1-162-282-31	s	CERAMIC	100PF	10%	50V
C608	1-162-282-31	s	CERAMIC	100PF	10%	50V
C618	1-124-465-00	s	ELECT	0.47	20%	50V
C621	1-124-465-00	s	ELECT	0.47	20%	50V
C750	1-126-103-11	s	ELECT	470	20%	16V
C751	1-161-494-00	s	CERAMIC	0.022	30%	25V
C752	1-161-494-00	s	CERAMIC	0.022	30%	25V
C753	1-161-494-00	s	CERAMIC	0.022	30%	25V
C754	1-161-494-00	s	CERAMIC	0.022	30%	25V
C755	1-161-494-00	s	CERAMIC	0.022	30%	25V
C756	1-161-494-00	s	CERAMIC	0.022	30%	25V
C757	1-161-494-00	s	CERAMIC	0.022	30%	25V
C758	1-161-494-00	s	CERAMIC	0.022	30%	25V
C759	1-161-494-00	s	CERAMIC	0.022	30%	25V
C760	1-161-494-00	s	CERAMIC	0.022	30%	25V
C761	1-161-494-00	s	CERAMIC	0.022	30%	25V
C762	1-161-494-00	s	CERAMIC	0.022	30%	25V
C763	1-161-494-00	s	CERAMIC	0.022	30%	25V
C764	1-161-494-00	s	CERAMIC	0.022	30%	25V
C765	1-161-494-00	s	CERAMIC	0.022	30%	25V
C766	1-161-494-00	s	CERAMIC	0.022	30%	25V
C767	1-161-494-00	s	CERAMIC	0.022	30%	25V
C801	1-161-494-00	s	CERAMIC	0.022	30%	25V
C802	1-161-494-00	s	CERAMIC	0.022	30%	25V
C803	1-161-494-00	s	CERAMIC	0.022	30%	25V
C804	1-161-494-00	s	CERAMIC	0.022	30%	25V
C805	1-161-494-00	s	CERAMIC	0.022	30%	25V
C806	1-161-494-00	s	CERAMIC	0.022	30%	25V
C807	1-161-494-00	s	CERAMIC	0.022	30%	25V
C808	1-161-494-00	s	CERAMIC	0.022	30%	25V
C809	1-161-494-00	s	CERAMIC	0.022	30%	25V
C810	1-161-494-00	s	CERAMIC	0.022	30%	25V
C811	1-161-494-00	s	CERAMIC	0.022	30%	25V
C812	1-161-494-00	s	CERAMIC	0.022	30%	25V
C813	1-161-494-00	s	CERAMIC	0.022	30%	25V
C814	1-161-494-00	s	CERAMIC	0.022	30%	25V
C815	1-161-494-00	s	CERAMIC	0.022	30%	25V
C816	1-161-494-00	s	CERAMIC	0.022	30%	25V
C817	1-161-494-00	s	CERAMIC	0.022	30%	25V
C818	1-161-494-00	s	CERAMIC	0.022	30%	25V
C819	1-161-494-00	s	CERAMIC	0.022	30%	25V
C820	1-161-494-00	s	CERAMIC	0.022	30%	25V
C821	1-161-494-00	s	CERAMIC	0.022	30%	25V
C822	1-161-494-00	s	CERAMIC	0.022	30%	25V
C823	1-161-494-00	s	CERAMIC	0.022	30%	25V
C824	1-161-494-00	s	CERAMIC	0.022	30%	25V
C825	1-161-494-00	s	CERAMIC	0.022	30%	25V
C826	1-161-494-00	s	CERAMIC	0.022	30%	25V
C827	1-161-494-00	s	CERAMIC	0.022	30%	25V
C828	1-161-494-00	s	CERAMIC	0.022	30%	25V
C829	1-161-494-00	s	CERAMIC	0.022	30%	25V
C830	1-161-494-00	s	CERAMIC	0.022	30%	25V
C831	1-161-494-00	s	CERAMIC	0.022	30%	25V

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Ref No.	Parts No.	SP	Description
C832	1-161-494-00	s	CERAMIC 0.022 30% 25V
C833	1-161-494-00	s	CERAMIC 0.022 30% 25V
C834	1-161-494-00	s	CERAMIC 0.022 30% 25V
C835	1-161-494-00	s	CERAMIC 0.022 30% 25V
C836	1-161-494-00	s	CERAMIC 0.022 30% 25V
C837	1-161-494-00	s	CERAMIC 0.022 30% 25V
C838	1-161-494-00	s	CERAMIC 0.022 30% 25V
C839	1-161-494-00	s	CERAMIC 0.022 30% 25V
C840	1-161-494-00	s	CERAMIC 0.022 30% 25V
C841	1-161-494-00	s	CERAMIC 0.022 30% 25V
C901	1-161-494-00	s	CERAMIC 0.022 30% 25V
C902	1-161-494-00	s	CERAMIC 0.022 30% 25V
C903	1-161-494-00	s	CERAMIC 0.022 30% 25V
C904	1-161-494-00	s	CERAMIC 0.022 30% 25V
C905	1-161-494-00	s	CERAMIC 0.022 30% 25V
C906	1-161-494-00	s	CERAMIC 0.022 30% 25V
C907	1-161-494-00	s	CERAMIC 0.022 30% 25V
C908	1-161-494-00	s	CERAMIC 0.022 30% 25V
C909	1-161-494-00	s	CERAMIC 0.022 30% 25V
C910	1-161-494-00	s	CERAMIC 0.022 30% 25V
C911	1-161-494-00	s	CERAMIC 0.022 30% 25V
C912	1-161-494-00	s	CERAMIC 0.022 30% 25V
C950	1-126-103-11	s	ELECT 470 20% 16V
C951	1-161-494-00	s	CERAMIC 0.022 30% 25V
C952	1-161-494-00	s	CERAMIC 0.022 30% 25V
C953	1-161-494-00	s	CERAMIC 0.022 30% 25V
CN1	1-506-747-21	o	PIN, DIN (DIP) 64P
CN2	1-506-747-21	o	PIN, DIN (DIP) 64P
D101	8-719-911-19	s	1SS119
D102	8-719-911-19	s	1SS119
D103	8-719-911-19	s	1SS119
D104	8-719-911-19	s	1SS119
D106	8-719-911-19	s	1SS119
D107	8-719-911-19	s	1SS119
D109	8-719-911-19	s	1SS119
D110	8-719-911-19	s	1SS119
D201	8-719-911-19	s	1SS119
D202	8-719-911-19	s	1SS119
D203	8-719-911-19	s	1SS119
D204	8-719-911-19	s	1SS119
D205	8-719-911-19	s	1SS119
D206	8-719-911-19	s	1SS119
D207	8-719-911-19	s	1SS119
D208	8-719-911-19	s	1SS119
D209	8-719-911-19	s	1SS119
D210	8-719-911-19	s	1SS119
D211	8-719-911-19	s	1SS119
D212	8-719-911-19	s	1SS119
D213	8-719-911-19	s	1SS119
D214	8-719-911-19	s	1SS119
D401	8-719-911-19	s	1SS119
D402	8-719-911-19	s	1SS119
D403	8-719-911-19	s	1SS119

Ref No.	Parts No.	SP	Description
D404	8-719-911-19	s	1SS119
D405	8-719-911-19	s	1SS119
D406	8-719-911-19	s	1SS119
D407	8-719-911-19	s	1SS119
D408	8-719-911-19	s	1SS119
D409	8-719-911-19	s	1SS119
D410	8-719-911-19	s	1SS119
D411	8-719-911-19	s	1SS119
D412	8-719-911-19	s	1SS119
D413	8-719-911-19	s	1SS119
D414	8-719-911-19	s	1SS119
D501	8-719-911-19	s	1SS119
D502	8-719-911-19	s	1SS119
D507	8-719-911-19	s	1SS119
D508	8-719-911-19	s	1SS119
D509	8-719-911-19	s	1SS119
D512	8-719-911-19	s	1SS119
D513	8-719-911-19	s	1SS119
D514	8-719-911-19	s	1SS119
D515	8-719-911-19	s	1SS119
D516	8-719-911-19	s	1SS119
D517	8-719-911-19	s	1SS119
D518	8-719-911-19	s	1SS119
D519	8-719-911-19	s	1SS119
D601	8-719-911-19	s	1SS119
D603	8-719-911-19	s	1SS119
D604	8-719-911-19	s	1SS119
D704	8-719-911-19	s	1SS119
D705	8-719-911-19	s	1SS119
D706	8-719-911-19	s	1SS119
IC101	8-752-006-00	s	CX20060(SONY)
IC102	8-743-915-10	s	BX3915A(SONY)
IC103	8-759-202-74	s	TC74HC04P(TOSHIBA)
IC104	8-759-345-38	s	HD14538BP(TOSHIBA)
IC105	8-759-208-10	s	TC4053BPHB(TOSHIBA)
IC106	8-759-345-38	s	HD14538BP(TOSHIBA)
IC107	8-759-205-76	s	TC504013BP(TOSHIBA)
IC108	8-759-729-03	s	NJM2903D(JRC)
IC109	8-759-140-17	s	UPD4017BC(TOSHIBA)
IC110	8-759-345-38	s	HD14538BP(TOSHIBA)
IC111	8-759-729-03	s	NJM2903D(JRC)
IC112	8-759-140-17	s	UPD4017BC(TOSHIBA)
IC113	8-759-345-38	s	HD14538BP(TOSHIBA)
IC114	8-759-241-61	s	TC40161BP(TOSHIBA)
IC115	8-759-240-71	s	TC4071BP(TOSHIBA)
IC116	8-759-345-38	s	HD14538BP(TOSHIBA)
IC117	8-759-202-14	s	TC74HC08P(TOSHIBA)
IC118	8-759-205-76	s	TC504013BP(TOSHIBA)
IC119	8-759-345-38	s	HD14538BP(TOSHIBA)
IC120	8-759-938-68	s	CXD1095Q(SONY)


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Ref No.	Parts No.	SP	Description
IC125	8-759-345-38	s	HD14538BP(TOSHIBA)
IC201	8-759-208-10	s	TC4053BPHB(TOSHIBA)
IC202	8-743-914-00	s	BX3914(SONY)
IC203	8-759-705-58	s	NJM4558D-D(JRC)
IC204	8-759-202-17	s	TC74HC14P(TOSHIBA)
IC205	8-759-208-10	s	TC4053BPHB(TOSHIBA)
IC206	8-759-345-38	s	HD14538BP(TOSHIBA)
IC207	8-759-240-01	s	TC4001BP(TOSHIBA)
IC208	8-759-240-23	s	TC4023BP(TOSHIBA)
IC209	8-759-208-10	s	TC4053BPHB(TOSHIBA)
IC210	8-759-202-74	s	TC74HC04P(TOSHIBA)
IC211	8-759-245-10	s	TC4510BP(TOSHIBA)
IC212	8-759-240-01	s	TC4001BP(TOSHIBA)
IC213	8-759-240-82	s	TC4082BP(TOSHIBA)
IC214	8-759-245-10	s	TC4510BP(TOSHIBA)
IC215	8-759-240-82	s	TC4082BP(TOSHIBA)
IC216	8-759-938-68	s	CXD1095Q(SONY)
IC217	8-759-202-14	s	TC74HC08P(TOSHIBA)
IC218	8-759-202-74	s	TC74HC04P(TOSHIBA)
IC219	8-759-970-31	s	MB88202H-567M
IC301	8-759-107-52	s	CXQ71054P(SONY)
IC302	8-759-107-52	s	CXQ71054P(SONY)
IC304	8-759-107-52	s	CXQ71054P(SONY)
IC306	8-759-240-24	s	TC4024BP(TOSHIBA)
IC307	8-759-202-74	s	TC74HC04P(TOSHIBA)
IC308	8-759-938-83	s	CF77074NT(TI)
IC309	8-759-938-83	s	CF77074NT(TI)
IC310	8-759-938-83	s	CF77074NT(TI)
IC311	8-759-240-30	s	TC4030BP(TOSHIBA)
IC401	8-759-132-40	s	UPC324C(NEC)
IC402	8-759-240-52	s	TC4052BP(TOSHIBA)
IC403	8-759-240-52	s	TC4052BP(TOSHIBA)
IC404	8-759-901-29	s	MSM5128-15RS(SONY)
IC405	8-759-746-82	s	27128-25(INTEL)
IC406	8-759-203-35	s	TC74HC373P(TOSHIBA)
IC407	8-759-113-03	s	UPD78310CW(NEC)
IC408	8-759-202-26	s	TC74HC138P(TOSHIBA)
IC409	8-759-202-26	s	TC74HC138P(TOSHIBA)
IC410	8-759-202-89	s	TC74HC139P(TOSHIBA)
IC411	8-759-103-95	s	UPC648C(NEC)
IC412	8-759-990-82	s	TL082CP(TI)
IC413	8-759-203-12	s	TC74HC241P(TOSHIBA)
IC414	8-759-208-14	s	TC4066BPHB(TOSHIBA)
IC415	8-759-208-14	s	TC4066BPHB(TOSHIBA)
IC416	8-759-990-84	s	TL084CN (TI)
IC417	8-759-990-84	s	TL084CN (TI)
IC418	8-759-708-09	s	NJM78L09A(JRC)
IC420	8-759-202-13	s	TC74HCU04P(TOSHIBA)
IC422	8-759-203-68	s	TC74HC4040P(TOSHIBA)
IC423	8-759-345-38	s	HD14538BP(TOSHIBA)
IC501	8-759-729-03	s	NJM2903D(JRC)
IC502	8-759-990-82	s	TL082CP(TI)
IC503	8-759-145-58	s	UPC4558C(NEC)
IC504	8-759-132-40	s	UPC324C(NEC)
IC505	8-759-208-10	s	TC4053BPHB(TOSHIBA)
IC506	8-759-729-03	s	NJM2903D(JRC)
IC507	8-759-910-43	s	CX23028(SONY)

Ref No.	Parts No.	SP	Description
IC509	8-759-345-38	s	HD14538BP(TOSHIBA)
IC510	8-759-729-03	s	NJM2903D(JRC)
IC511	8-759-729-03	s	NJM2903D(JRC)
IC512	8-759-345-38	s	HD14538BP(TOSHIBA)
IC513	8-759-902-21	s	SN74LS221N(TI)
IC514	8-759-990-82	s	TL082CP(TI)
IC515	8-759-990-82	s	TL082CP(TI)
IC516	8-759-938-68	s	CXD1095Q(SONY)
IC601	8-759-990-84	s	TL084CN(TI)
IC602	8-759-132-40	s	UPC324C(NEC)
IC603	8-759-145-58	s	UPC4558C(NEC)
IC604	8-759-990-84	s	TL084CN(TI)
IC605	8-759-132-40	s	UPC324C(NEC)
IC606	8-759-240-52	s	TC4052BP(TOSHIBA)
IC607	8-759-208-10	s	TC4053BPHB(TOSHIBA)
IC608	8-759-729-03	s	NJM2903D(JRC)
IC609	8-759-729-03	s	NJM2903D(JRC)
IC610	8-759-910-43	s	CX23028(SONY)
L201	1-459-155-00	s	(WITH CORE) 45
L701	1-459-155-00	s	(WITH CORE) 45
L702	1-459-155-00	s	(WITH CORE) 45
L703	1-459-155-00	s	(WITH CORE) 45
L704	1-459-155-00	s	(WITH CORE) 45
Q101	8-729-201-05	s	2SC2878-B
Q102	8-729-201-05	s	2SC2878-B
Q103	8-729-900-36	s	DTC124ES
Q104	8-729-900-36	s	DTC124ES
Q105	8-729-201-05	s	2SC2878-B
Q106	8-729-900-36	s	DTC124ES
Q201	8-729-900-36	s	DTC124ES
Q202	8-729-900-63	s	DTA124ES
Q203	8-729-178-54	s	2SC2785
Q204	8-729-900-36	s	DTC124ES
Q205	8-729-900-36	s	DTC124ES
Q206	8-729-900-36	s	DTC124ES
Q207	8-729-178-54	s	2SC2785
Q301	8-729-900-36	s	DTC124ES
Q401	8-729-178-54	s	2SC2785
Q402	8-729-178-54	s	2SC2785
Q403	8-729-178-54	s	2SC2785
Q404	8-729-178-54	s	2SC2785
Q405	8-729-117-54	s	2SA1175
Q406	8-729-178-54	s	2SC2785
Q407	8-729-900-63	s	DTA124ES
Q408	8-729-900-36	s	DTC124ES
Q409	8-729-900-36	s	DTC124ES
Q410	8-729-900-36	s	DTC124ES
Q411	8-729-178-54	s	2SC2785

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Ref No.	Parts No.	SP	Description			
Q412	8-729-900-63	s	DTA124ES			
Q501	8-729-900-36	s	DTC124ES			
Q502	8-729-201-05	s	2SC2878-B			
Q503	8-729-201-05	s	2SC2878-B			
Q504	8-729-201-05	s	2SC2878-B			
Q505	8-729-201-05	s	2SC2878-B			
Q506	8-729-900-36	s	DTC124ES			
Q507	8-729-900-36	s	DTC124ES			
Q508	8-729-201-05	s	2SC2878-B			
Q509	8-729-201-05	s	2SC2878-B			
Q510	8-729-900-36	s	DTC124ES			
Q511	8-729-900-36	s	DTC124ES			
Q602	8-729-900-36	s	DTC124ES			
Q603	8-729-900-63	s	DTA124ES			
Q604	8-729-201-05	s	2SC2878-B			
Q605	8-729-900-63	s	DTA124ES			
Q606	8-729-201-05	s	2SC2878-B			
Q607	8-729-201-05	s	2SC2878-B			
Q608	8-729-201-05	s	2SC2878-B			
Q609	8-729-201-05	s	2SC2878-B			
Q610	8-729-178-54	s	2SC2785			
Q611	8-729-178-54	s	2SC2785			
Q612	8-729-178-54	s	2SC2785			
Q613	8-729-900-36	s	DTC124ES			
R110	1-247-899-11	s	CARBON	680k	5%	1/4W
R114	1-247-899-11	s	CARBON	680k	5%	1/4W
R163	1-247-899-11	s	CARBON	680k	5%	1/4W
R240	1-247-903-00	s	CARBON	1M	5%	1/4W
R244	1-247-887-00	s	CARBON	220k	5%	1/4W
R256	1-247-903-00	s	CARBON	1M	5%	1/4W
R435	1-247-903-00	s	CARBON	1M	5%	1/4W
R441	1-247-885-00	s	CARBON	330k	5%	1/4W
R446	1-247-903-00	s	CARBON	1M	5%	1/4W
R450	1-247-887-00	s	CARBON	220k	5%	1/4W
R451	1-247-887-00	s	CARBON	220k	5%	1/4W
R452	1-247-883-00	s	CARBON	150k	5%	1/6W
R510	1-247-903-00	s	CARBON	1M	5%	1/4W
R521	1-247-903-00	s	CARBON	1M	5%	1/4W
R529	1-247-903-00	s	CARBON	1M	5%	1/4W
R530	1-247-895-00	s	CARBON	470k	5%	1/6W
R531	1-247-889-00	s	CARBON	270k	5%	1/4W
R535	1-247-887-00	s	CARBON	220k	5%	1/6W
R541	1-247-891-00	s	CARBON	330k	5%	1/6W
R551	1-247-895-00	s	CARBON	470k	5%	1/6W
R557	1-247-889-00	s	CARBON	270k	5%	1/4W
R566	1-247-887-00	s	CARBON	220k	5%	1/6W
R574	1-247-887-00	s	CARBON	220k	5%	1/6W
R582	1-247-887-00	s	CARBON	220k	5%	1/6W
R584	1-247-881-00	s	CARBON	120k	5%	1/6W
R589	1-247-887-00	s	CARBON	220k	5%	1/6W
R598	1-247-893-11	s	CARBON	390k	5%	1/4W
R601	1-247-747-11	s	CARBON	470	5%	1/2W
R602	1-247-747-11	s	CARBON	470	5%	1/2W
R610	1-247-881-00	s	CARBON	120k	5%	1/6W

Ref No.	Parts No.	SP	Description			
R620	1-247-887-00	s	CARBON	220k	5%	1/4W
R621	1-247-895-00	s	CARBON	470k	5%	1/4W
R630	1-247-903-00	s	CARBON	1M	5%	1/4W
R640	1-247-887-00	s	CARBON	220k	5%	1/6W
R650	1-247-885-00	s	CARBON	330k	5%	1/4W
R651	1-247-893-11	s	CARBON	390k	5%	1/4W
R660	1-247-903-00	s	CARBON	1M	5%	1/4W
R688	1-247-887-00	s	CARBON	220k	5%	1/6W
R740	1-532-675-00	s	LINK, IC			
R741	1-532-675-00	s	LINK, IC			
R742	1-532-675-00	s	LINK, IC			
R743	1-532-675-00	s	LINK, IC			
R800	1-247-895-00	s	CARBON	470k	5%	1/6W
R809	1-247-895-00	s	CARBON	470k	5%	1/6W
R810	1-247-895-00	s	CARBON	470k	5%	1/6W
R859	1-247-895-00	s	CARBON	470k	5%	1/4W
R860	1-247-901-11	s	CARBON	820k	5%	1/4W
R862	1-247-903-00	s	CARBON	1M	5%	1/4W
R863	1-247-903-00	s	CARBON	1M	5%	1/4W
RB201	1-231-411-00	s	RESISTOR BLOCK 100K			
RV101	1-228-996-00	s	VAR, CARBON 47K			
RV102	1-228-996-00	s	VAR, CARBON 47K			
RV103	1-230-499-11	s	VAR, CARBON 100K			
RV104	1-230-499-11	s	VAR, CARBON 100K			
RV401	1-230-720-11	s	VAR, CARBON 4.7k			
RV402	1-228-990-00	s	VAR, METAL GLAZE 1k			
RV403	1-228-997-00	s	VAR, CARBON 100K			
RV404	1-228-997-00	s	VAR, CARBON 100K			
RV405	1-228-994-00	s	VAR, METAL GLAZE 10k			
RV501	1-228-995-00	s	VAR, METAL GLAZE 22k			
RV502	1-228-994-00	s	VAR, METAL GLAZE 10k			
RV503	1-228-994-00	s	VAR, METAL GLAZE 10k			
RV504	1-228-999-00	s	VAR, CARBON 470K			
RV505	1-228-996-00	s	VAR, CARBON 47K			
RV506	1-228-995-00	s	VAR, CARBON 22k			
RV507	1-228-994-00	s	VAR, METAL GLAZE 10k			
RV601	1-228-994-00	s	VAR, METAL GLAZE 10k			
RV602	1-228-994-00	s	VAR, METAL GLAZE 10k			
RV603	1-228-994-00	s	VAR, METAL GLAZE 10k			
S201	1-570-623-11	s	DIP			
S202	1-552-509-00	s	DIP			
X401	1-567-865-11	s	VIBRATOR, CRYSTAL 12MHz			

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

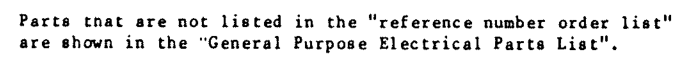
Ref No.	Parts No.	SP	Description
SW-170B BOARD			
	1-622-737-12	o	PRINTED CIRCUIT BOARD, SW-170B
D1	8-719-800-86	s	TLG255
D2	8-719-800-86	s	TLG255
D3	8-719-800-86	s	TLG255
D4	8-719-800-89	s	TLY255
D5	8-719-800-89	s	TLY255
D6	8-719-800-89	s	TLY255
Q1	8-729-178-55	s	2SC2785-E
Q2	8-729-178-55	s	2SC2785-E
Q3	8-729-178-55	s	2SC2785-E
RV1	1-237-713-11	s	VAR, VAR, CARBON 100k
S3	1-516-963-00	s	LEVER SLIDE "AUDIO MONITOR"
S5	1-516-961-00	s	LEVER SLIDE "REMOTE/LOCAL"
SW-290 BOARD			
	1-626-680-11	o	PRINTED CIRCUIT BOARD, SW-290
D1	8-719-812-43	s	TLG124A
S1	1-554-481-00	s	SLIDE "CHARACTER"
S3	1-554-481-00	s	SLIDE "REMOTE"
S4	1-554-481-00	s	SLIDE "INT TBC"
S5	1-554-481-00	s	SLIDE "TIME CODE"

Ref No.	Parts No.	SP	Description
SY-102B BOARD			
	A-6729-726-A	o	MOUNTED CIRCUIT BOARD, SY-102B
C1	1-124-236-00	s	ELECT 47 20% 16V
C2	1-124-236-00	s	ELECT 47 20% 16V
C5	1-124-236-00	s	ELECT 47 20% 16V
C6	1-161-379-00	s	CERAMIC 0.01 30% 16V
C8	1-124-255-00	s	ELECT 1 20% 50V
C10	1-124-236-00	s	ELECT 47 20% 16V
C11	1-124-245-00	s	ELECT 4.7 20% 16V
C12	1-107-169-00	s	MICA 100PF 5% 500V
C13	1-107-169-00	s	MICA 100PF 5% 500V
C14	1-161-379-00	s	CERAMIC 0.01 30% 16V
C15	1-161-379-00	s	CERAMIC 0.01 30% 16V
C16	1-161-379-00	s	CERAMIC 0.01 30% 16V
C17	1-162-210-31	s	CERAMIC 30PF 5% 50V
C18	1-162-210-31	s	CERAMIC 30PF 5% 50V
C19	1-124-236-00	s	ELECT 47 20% 16V
C20	1-161-379-00	s	CERAMIC 0.01 30% 16V
C21	1-161-379-00	s	CERAMIC 0.01 30% 16V
C22	1-124-236-00	s	ELECT 47 20% 16V
C23	1-161-379-00	s	CERAMIC 0.01 30% 16V
C27	1-124-255-00	s	ELECT 1 20% 50V
C28	1-124-247-00	s	ELECT 10 20% 25V
C29	1-124-236-00	s	ELECT 47 20% 16V
C30	1-124-255-00	s	ELECT 1 20% 50V
C31	1-102-973-91	s	CERAMIC 100PF 5% 50V
C35	1-162-215-31	s	CERAMIC 47PF 5% 50V
C36	1-161-379-00	s	CERAMIC 0.01 30% 16V
C37	1-161-379-00	s	CERAMIC 0.01 30% 16V
C38	1-161-379-00	s	CERAMIC 0.01 30% 16V
C39	1-161-379-00	s	CERAMIC 0.01 30% 16V
C40	1-161-379-00	s	CERAMIC 0.01 30% 16V
C41	1-161-379-00	s	CERAMIC 0.01 30% 16V
C42	1-161-379-00	s	CERAMIC 0.01 30% 16V
C43	1-161-379-00	s	CERAMIC 0.01 30% 16V
C44	1-161-379-00	s	CERAMIC 0.01 30% 16V
C48	1-162-207-31	s	CERAMIC 22PF 5% 50V
C49	1-162-207-31	s	CERAMIC 22PF 5% 50V
C51	1-124-245-00	s	ELECT 4.7 20% 16V
CN558	1-506-701-11	o	HEADER 10P
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-911-19	s	1SS119
D9	8-719-911-19	s	1SS119
D10	8-719-911-19	s	1SS119
D11	8-719-911-19	s	1SS119
D12	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-911-19	s	1SS119
D17	8-719-911-19	s	1SS119
D18	8-719-911-19	s	1SS119

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Ref No.	Parts No.	SP	Description
IC1	8-759-208-85	s	TMPZ84C011AF(TOSHIBA)
IC3	8-752-321-08	s	CXK5864PN-15L(SONY)
IC4	8-759-942-12	s	MBM2212-25P(FUJITSU)
IC5	8-759-916-84	s	LH0084A(SHARP)
IC6	8-759-938-68	s	CXD1095Q(SONY)
IC7	8-759-944-65	s	MB88551H-263M(FUJITSU)
IC8	8-759-045-38	s	MC14538BCP(MOTOROLA)
IC9	8-759-202-74	s	TC74HC04P(TOSHIBA)
IC10	8-759-240-69	s	TC4069UBP(TOSHIBA)
IC11	8-759-044-64	s	MC74HC126N(TI)
IC12	8-759-008-57	s	MC34051P(MOTOROLA)
IC13	8-759-202-21	s	TC74HC32P(TI)
IC14	8-759-202-89	s	TC74HC139P(TI)
IC15	8-759-145-58	s	UPC4558C(NEC)
IC16	8-759-729-03	s	NJM2903D(JRC)
IC17	8-759-202-21	s	TC74HC32P(TI)
IC18	8-759-202-17	s	TC74HC14P(TOSHIBA)
Q2	8-729-900-65	s	DTA144ES
Q3	8-729-900-89	s	DTC144ES
Q4	8-729-900-89	s	DTC144ES
Q5	8-729-275-42	s	2SC2754-Y
Q6	8-729-275-42	s	2SC2754-Y
Q7	8-729-178-55	s	2SC2785-E
Q8	8-729-178-55	s	2SC2785-E
Q9	8-729-900-89	s	DTC144ES
Q11	8-729-811-11	s	2SD1111
R8	1-247-881-00	s	CARBON 120k 5% 1/6W
R11	1-247-903-00	s	CARBON 1M 5% 1/4W
R13	1-247-903-00	s	CARBON 1M 5% 1/4W
R44	1-247-887-00	s	CARBON 220k 5% 1/6W
R47	1-247-887-00	s	CARBON 220k 5% 1/6W
RB2	1-235-005-00	s	RESISTOR BLOCK 47K
RB3	1-231-410-00	s	RESISTOR BLOCK 10K
RB6	1-235-109-00	s	RESISTOR BLOCK 22K
RB7	1-235-109-00	s	RESISTOR BLOCK 22K
RB9	1-231-407-00	s	RESISTOR BLOCK 2.2K
RB10	1-231-410-00	s	RESISTOR BLOCK 10K
RB11	1-231-410-00	s	RESISTOR BLOCK 10K
RV1	1-230-497-11	s	VAR, CARBON 22k
X1	1-567-870-11	s	VIBRATOR, CERAMIC 9.83MHz
X2	1-567-132-00	s	VIBLATOR, CERAMIC 8MHz

Ref No.	Parts No.	SP	Description
TC-51 BOARD			
	A-6717-497-1	o	MOUNTED CIRCUIT BOARD, TC-51
C4	1-124-234-00	s	ELECT 22 20% 16V
C5	1-124-234-00	s	ELECT 22 20% 16V
C8	1-124-499-11	s	ELECT 1 20% 50V
C9	1-162-203-31	s	CERAMIC 15PF 5% 50V
C35	1-124-462-00	s	ELECT 10 20% 16V
C70	1-162-290-31	s	CERAMIC 470PF 10% 50V
C71	1-162-290-31	s	CERAMIC 470PF 10% 50V
C73	1-162-290-31	s	CERAMIC 470PF 10% 50V
C78	1-162-290-31	s	CERAMIC 470PF 10% 50V
C79	1-162-290-31	s	CERAMIC 470PF 10% 50V
C81	1-162-282-31	s	CERAMIC 100PF 10% 50V
C145	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C146	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C147	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C148	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C149	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C150	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C151	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C152	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C153	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C154	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C155	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C156	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C157	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C158	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C159	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C160	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C161	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C162	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C163	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C164	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
C165	1-161-379-00	s	CAP CERAMIC 10000PF 30% 16V
CV1	1-141-260-00	s	CERAMIC TRIMMAR
D1	8-719-911-19	s	ISS119
D2	8-719-911-19	s	ISS119
D3	8-719-911-19	s	ISS119
D7	8-719-911-19	s	ISS119
IC1	8-759-909-72	s	CX7912A(SONY)
IC5	8-759-908-23	s	MB8803(FUJITSU)
IC8	8-759-902-34	s	SN74LS224N(TI)
IC9	8-759-045-38	s	MC14538BCP(MOTOROLA)
IC10	8-759-916-29	s	SN74HC74N(TI)
IC11	8-759-990-62	s	TL062CP(TI)
IC12	8-759-202-26	s	TC74HC138P(TOSHIBA)
IC14	8-759-916-29	s	SN74HC74N(TI)
IC15	8-759-203-36	s	TC74HC374P(TOSHIBA)
IC16	8-759-202-55	s	TC74HC244P(TOSHIBA)


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Ref No.	Parts No.	SP	Description
IC17	8-759-045-38	s	MC14538BCP(MOTOROLA)
IC21	8-759-045-38	s	MC14538BCP(MOTOROLA)
IC26	8-759-045-38	s	MC14538BCP(MOTOROLA)
IC27	8-759-200-05	s	TC40H008P(TOSHIBA)
IC28	8-759-240-30	s	TC4030BP(TOSHIBA)
IC29	8-759-916-29	s	SN74HC74N(TI)
IC30	8-759-220-32	s	TC40H032P(TOSHIBA)
IC31	8-759-220-02	s	TC40H002P(TOSHIBA)
IC32	8-759-200-00	s	TC40H000P(TOSHIBA)
IC33	8-759-145-84	s	MPD4584BC(NEC)
IC35	8-759-240-44	s	TC4044BP(TOSHIBA)
IC36	8-759-245-12	s	TC4512BP(TOSHIBA)
R40	1-247-897-11	s	CARBON 560k 5% 1/4W
R42	1-247-903-00	s	CARBON 1M 5% 1/4W
R125	1-247-903-00	s	CARBON 1M 5% 1/4W
X1	1-527-827-00	s	CRYSTAL 4.9152MHz

VR-49 BOARD

Ref No.	Parts No.	SP	Description
	1-622-731-11	o	PRINTED CIRCUIT BOARD, VR-49
R11	1-249-406-11	s	CARBON 120 5% 1/6W
R12	1-249-406-11	s	CARBON 120 5% 1/6W
RV11	1-228-218-00	s	VAR, CARBON 500/500

VR-76 BOARD

Ref No.	Parts No.	SP	Description
	1-626-682-11	o	PRINTED CIRCUIT BOARD, VR-76
D201	8-719-911-19	s	1SS119
D202	8-719-911-19	s	1SS119
IC1	8-759-705-62	s	NJM4562D-D(JRC)
IC2	8-749-938-90	s	BX389(SONY)
L1	1-410-482-31	s	MICRO 100
Q1	8-729-603-50	s	2SC403SP
R202	1-247-840-00	s	CARBON 2.4k 5% 1/4W
RV1	1-230-339-11	s	VAR, CARBON 100k
RV2	1-238-217-11	s	VAR, CARBON 5k
RV3	1-238-217-11	s	VAR, CARBON 5k
RV4	1-228-994-00	s	VAR, CARBON 10k

SWITCHING REGULATOR UR-21

Ref No.	Parts No.	SP	Description
⚠	1-413-307-13	s	SWITCHING REGULATOR UR-21
⚠CN961	1-562-285-11	o	HOUSING 4P
M201	1-541-524-11	o	DC FAN

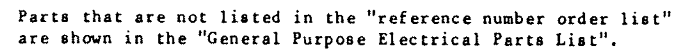
UR-21 C1 BOARD

Ref No.	Parts No.	SP	Description
C51	1-161-925-91	s	CERAMIC 100PF 10% 500V
C52	1-161-925-91	s	CERAMIC 100PF 10% 500V
C53	1-131-458-51	s	TANTAL 1.5 20% 16V
C55	1-130-018-51	s	FILM 0.001 5% 50V
C56	1-130-528-51	s	TEREPHTHALATE 0.1 10% 50V
C57	1-130-506-91	s	TEREPHTHALATE 0.0015 10% 50V
C59	1-130-528-51	s	TEREPHTHALATE 0.1 10% 50V
C61	1-124-924-91	s	ELECT 1 20% 100V
CN52	1-564-352-11	o	PIN, 7P
CN53	1-564-352-11	o	PIN, 7P
D51	1-807-913-21	s	11EQS04
D52	1-807-913-21	s	11EQS04
D53	1-807-913-21	s	11EQS04
D54	1-807-913-21	s	11EQS04
D55	8-719-911-19	s	1SS119
D56	8-719-911-19	s	1SS119
D57	8-719-109-93	s	RD6.2ES-B3
D58	8-719-107-87	s	THYRISTOR 03P2M
D59	8-719-911-19	s	1SS119
D60	8-719-911-19	s	1SS119
D61	8-719-911-19	s	1SS119
D62	8-719-911-19	s	1SS119
D63	8-719-109-75	s	RD4.3ES-B2
IC51	8-759-937-59	s	MB3759(FUJITSU)
IC52	8-759-103-93	s	UPC393C(NEC)
L51	1-410-466-21	s	MICRO 4.7
Q51	8-729-208-04	s	2SK422
Q52	8-729-208-04	s	2SK422
Q53	8-729-117-54	s	2SA1175
Q54	8-729-178-54	s	2SC2785
Q55	8-729-117-54	s	2SA1175

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Ref No.	Parts No.	SP	Description
R51	1-247-817-91	s	CARBON 270 5% 1/4W
R52	1-247-829-91	s	CARBON 820 5% 1/4W
R53	1-247-825-91	s	CARBON 560 5% 1/4W
R54	1-247-825-91	s	CARBON 560 5% 1/4W
R55	1-215-445-91	s	METAL 10K 1% 1/6W
R56	1-247-903-91	s	CARBON 1M 5% 1/4W
R57	1-247-823-91	s	CARBON 470 5% 1/4W
R58	1-247-875-91	s	CARBON 68K 5% 1/4W
R60	1-247-835-91	s	CARBON 1.5K 5% 1/4W
R61	1-247-849-91	s	CARBON 5.6K 5% 1/4W
R62	1-247-831-91	s	CARBON 1K 5% 1/4W
R63	1-247-839-91	s	CARBON 2.2K 5% 1/4W
R64	1-247-847-91	s	CARBON 4.7K 5% 1/4W
R65	1-247-847-91	s	CAROBN 4.7K 5% 1/4W
R66	1-247-869-91	s	CARBON 39K 5% 1/4W
R67	1-247-839-91	s	CARBON 2.2K 5% 1/4W
R68	1-247-853-91	s	CARBON 8.2K 5% 1/4W
R69	1-247-831-91	s	CARBON 1K 5% 1/4W
R70	1-247-849-91	s	CARBON 5.6K 5% 1/4W
R71	1-247-831-91	s	CARBON 1K 5% 1/4W
R72	1-247-843-91	s	CARBON 3.3K 5% 1/4W
R73	1-247-841-91	s	CARBON 2.7K 5% 1/4W
R74	1-247-843-91	s	CARBON 3.3K 5% 1/4W
R75	1-247-843-91	s	CARBON 3.3K 5% 1/4W
R76	1-247-839-91	s	CARBON 2.2K 5% 1/4W
R77	1-247-839-91	s	CARBON 2.2K 5% 1/4W
R78	1-247-839-91	s	CARBON 2.2K 5% 1/4W
R79	1-247-849-91	s	CARBON 5.6K 5% 1/4W
R80	1-247-855-91	s	CARBON 10K 5% 1/4W
R81	1-247-847-91	s	CARBON 4.7K 5% 1/4W
R82	1-247-865-91	s	CARBON 27K 5% 1/4W
R83	1-247-857-91	s	CARBON 12K 5% 1/4W
R84	1-247-821-91	s	CARBON 390 5% 1/4W
R85	1-247-831-91	s	CARBON 1K 5% 1/4W
RV51	1-228-990-11	s	VAR, METAL GLAZE 1K

Ref No.	Parts No.	SP	Description
UR-21 C2 BOARD			
C51	1-161-925-91	s	CERAMIC 100PF 10% 500V
C52	1-161-925-91	s	CERAMIC 100PF 10% 500V
C53	1-131-458-51	s	TANTAL 1.5 20% 16V
C55	1-130-018-51	s	FILM 0.001 5% 50V
C56	1-130-528-51	s	TEREPHTHALATE 0.1 10% 50V
C57	1-130-506-91	s	TEREPHTHALATE 0.0015 10% 50V
C59	1-130-528-51	s	TEREPHTHALATE 0.1 10% 50V
CN52	1-564-352-11	o	PIN, 7P
CN53	1-564-352-11	o	PIN, 7P
D51	1-807-913-21	s	11EQS04
D52	1-807-913-21	s	11EQS04
D53	1-807-913-21	s	11EQS04
D54	1-807-913-21	s	11EQS04
D55	1-719-911-19	s	1SS119
D56	1-719-911-19	s	1SS119
D57	8-719-112-98	s	RD15ES-T1B2
D58	8-719-108-87	s	03P2M
D59	8-719-911-19	s	1SS119
D60	8-719-911-19	s	1SS119
D61	8-719-911-19	s	1SS119
D62	8-719-911-19	s	1SS119
D63	8-719-112-73	s	RD11ES-T1B2
IC51	8-759-937-59	s	MB3759(FUJITSU)
IC52	8-759-103-93	s	UPC393C(NEC)
L51	1-410-466-21	s	MICRO 4.7
Q51	8-729-208-04	s	2SK422
Q52	8-729-208-04	s	2SK422
Q53	8-729-117-54	s	2SA1175
Q54	8-729-178-54	s	2SC2785
Q55	8-729-117-54	s	2SA1175
R51	1-247-813-91	s	CARBON 180 5% 1/4W
R52	1-247-829-91	s	CARBON 820 5% 1/4W
R53	1-247-825-91	s	CARBON 560 5% 1/4W
R54	1-247-825-91	s	CARBON 560 5% 1/4W
R55	1-215-445-91	s	METAL 10K 1% 1/6W
R56	1-247-903-91	s	CARBON 1M 5% 1/4W
R57	1-247-823-91	s	CARBON 470 5% 1/4W
R58	1-247-877-91	s	CARBON 82K 5% 1/4W
R60	1-247-813-91	s	CARBON 7.5K 5% 1/4W
R61	1-247-849-91	s	CARBON 27K 5% 1/4W
R62	1-247-835-91	s	CARBON 1.5K 5% 1/4W
R63	1-247-839-91	s	CARBON 2.2K 5% 1/4W
R64	1-247-865-91	s	CARBON 4.7K 5% 1/4W
R65	1-247-847-91	s	CARBON 4.7K 5% 1/4W
R66	1-247-869-91	s	CARBON 39K 5% 1/4W


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Ref No.	Parts No.	SP	Description
R68	1-247-853-91	s	CARBON 8.2K 5% 1/4W
R69	1-247-831-91	s	CARBON 1K 5% 1/4W
R70	1-247-849-91	s	CARBON 5.6K 5% 1/4W
R71	1-247-831-91	s	CARBON 1K 5% 1/4W
R72	1-247-843-91	s	CARBON 3.3K 5% 1/4W
R73	1-247-841-91	s	CARBON 2.7K 5% 1/4W
R74	1-247-855-91	s	CARBON 10K 5% 1/4W
R75	1-247-855-91	s	CARBON 10K 5% 1/4W
R76	1-247-839-91	s	CARBON 2.2K 5% 1/4W
R77	1-247-855-91	s	CARBON 10K 5% 1/4W
R78	1-247-847-91	s	CARBON 4.7K 5% 1/4W
R79	1-247-863-91	s	CARBON 22K 5% 1/4W
R80	1-247-855-91	s	CARBON 10K 5% 1/5W
R81	1-247-849-91	s	CARBON 5.6K 5% 1/4W
R83	1-247-843-91	s	CARBON 3.3K 5% 1/4W
R84	1-247-847-91	s	CARBON 4.7K 5% 1/4W
R85	1-247-831-91	s	CAROBN 1K 5% 1/4W
RV51	1-228-990-11	s	VAR, METAL GLAZE 1K

Ref No.	Parts No.	SP	Description
UR-21 M1 BOARD			
C101	1-136-564-11	s	CERAMIC 1000PF 10% 500V
C102	1-136-564-11	s	CERAMIC 1000PF 10% 500V
C104	1-125-477-11	s	ELECT 470 20% 400V
C105	1-125-477-11	s	ELECT 470 20% 400V
C106	1-161-915-11	s	CERAMIC 1000PF 10% 500V
C107	1-161-915-11	s	CERAMIC 1000PF 10% 500V
C203	1-161-915-11	s	CERAMIC 1000PF 10% 500V
C204	1-161-915-11	s	CERAMIC 1000PF 10% 500V
C205	1-124-636-51	s	ELECT 3300 20% 25V
C206	1-130-516-91	s	TEREPHTHALATE 0.01 10% 50V
C209	1-124-891-51	s	ELECT 10000 20% 6.3V
C211	1-130-772-21	s	METAL 0.22 10% 63V
C212	1-124-621-51	s	ELECT 3300 20% 6.3V
C213	1-130-772-21	s	METAL 0.22 10% 63V
C214	1-124-585-51	s	ELECT 3300 20% 10V
C221	1-130-518-91	s	TEREPHTHALATE 0.015 10% 50V
C222	1-130-524-51	s	TEREPHTHALATE 0.047 10% 50V
C223	1-130-524-51	s	TEREPHTHALATE 0.047 10% 50V
C227	1-124-120-51	s	ELECT 220 20% 25V
C228	1-130-772-21	s	METAL 0.22 10% 63V
C229	1-130-772-21	s	METAL 0.22 10% 63V
C230	1-130-772-21	s	METAL 0.22 10% 63V
⚠CN101	1-564-242-11	o	5P
CN201	1-564-932-11	o	9P
CN202	1-560-893-11	o	5P
CN203	1-560-299-11	o	2P
CN204	1-560-890-21	o	2P
D101	8-719-109-75	s	RD4.3ES-B2
D102	8-719-912-20	s	1SS120
D103	1-807-913-21	s	11EQS04
D104	1-807-913-21	s	11EQS04
D201	1-807-774-21	s	AU02A
D202	8-719-109-85	s	RD5.1ES-B2
D203	8-719-109-85	s	RD5.1ES-B2
D204	8-719-911-19	s	1SS119
D205	8-719-200-01	s	10E-1
D206	8-719-200-01	s	10E-1
D207	1-807-911-11	s	F10P40F
D208	8-719-200-01	s	10E-1
D209	8-719-200-01	s	10E-1
D210	8-719-302-60	s	FML-32S
D211	1-807-963-21	s	31DF2
D212	1-807-963-21	s	31DF2
D213	8-719-110-13	s	RD9.1ES-B2
D214	1-807-911-21	s	F10P40FR
D215	8-719-912-20	s	1SS120
D216	8-719-912-20	s	1SS120
D220	8-719-200-01	s	10E-1
D222	8-719-200-01	s	10E-1

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
FB201	1-543-060-11	s	
FB202	1-543-060-11	s	
FB203	1-543-060-11	s	
FB204	1-543-060-11	s	
FB205	1-543-060-11	s	
FB206	1-543-060-11	s	
IC101	1-807-814-11	s	B-5272(JRM)
IC201	8-759-135-80	s	UPC358C(NEC)
IC202	8-759-077-33	s	TL431CLP(TI)
IC203	8-759-077-33	s	TL431CLP(TI)
L201	A-4935-038-A	s	CHOKE
L202	1-421-459-21	s	CHOKE
L203	A-4935-037-A	s	CHOKE
L204	1-421-459-21	s	CHOKE
L205	1-421-734-11	s	CHOKE
L206	1-421-459-21	s	CHOKE
L207	1-421-459-21	s	CHOKE
⚠PS101	1-532-605-11	s	LINK, IC
PS102	1-532-605-11	s	LINK, IC
PS201	1-532-605-11	s	LINK, IC
Q101	1-807-858-11	s	IREP451
Q102	1-807-858-11	s	IREP451
Q103	8-729-113-32	s	2SB733
Q104	8-729-113-32	s	2SB733
Q201	8-729-103-43	s	2SB734
Q202	8-729-178-54	s	2SC2785
Q203	8-729-178-54	s	2SC2785
Q204	8-729-178-54	s	2SC2785
Q205	1-807-914-11	s	2SA1443
Q206	8-729-177-43	s	2SD774
Q207	1-807-914-11	s	2SA1443
Q208	8-729-117-54	s	2SA1175
Q209	1-807-195-11	s	2SC3692
Q210	8-729-178-54	s	2SC2785
R101	1-247-855-91	s	CARBON 10K 5% 1/4W
R102	1-246-473-75	s	CARBON 1K 5% 1/4W
⚠R103	1-247-692-51	s	CARBON 22 5% 1/4W
R104	1-247-692-51	s	CARBON 22 5% 1/4W
R105	1-247-831-91	s	CARBON 1K 5% 1/4W
R106	1-247-831-91	s	CAROBN 1K 5% 1/4W
⚠R107	1-205-622-11	s	CEMENT 33 5% 5W
R201	1-247-849-91	s	CARBON 5.6K 5% 1/4W
R202	1-247-837-91	s	CARBON 1.8K 5% 1/4W
R203	1-246-445-75	s	CARBON 68 5% 1/4W

Ref No.	Parts No.	SP	Description
R204	1-247-855-91	s	CARBON 10K 5% 1/4W
R205	1-247-861-91	s	CARBON 18K 5% 1/4W
R206	1-247-841-91	s	CARBON 2.7K 5% 1/4W
R207	1-247-849-91	s	CARBON 5.6K 5% 1/4W
R208	1-247-843-91	s	CARBON 3.3K 5% 1/4W
R209	1-247-831-91	s	CAROBN 1K 5% 1/4W
⚠R210	1-205-623-11	s	CEMENT 47 5% 5W
R212	1-206-648-61	s	FILM 220 5% 2W
R213	1-247-859-91	s	CARBON 15K 5% 1/4W
R214	1-247-855-91	s	CARBON 10K 5% 1/4W
R215	1-247-887-91	s	CAROBN 220K 5% 1/4W
R216	1-215-451-91	s	METAL 18K 1% 1/6W
R217	1-215-435-91	s	METAL 3.9K 1% 1/6W
R218	1-215-426-91	s	METAL 1.6K 1% 1/6W
R219	1-215-425-91	s	METAL 1.5K 1% 1/6W
⚠R220	1-213-137-61	s	METAL 330 5% 1W
R221	1-246-441-75	s	CARBON 47 5% 1/4W
R222	1-247-831-01	s	CARBON 1K 5% 1/4W
R223	1-247-837-91	s	CARBON 1.8K 5% 1/4W
R224	1-247-835-91	s	CARBON 1.5K 5% 1/4W
⚠R225	1-213-135-61	s	METAL 220 5% 1W
R226	1-247-841-91	s	CARBON 2.7K 5% 1/4W
R227	1-215-446-91	s	METAL 11K 1% 1/6W
R228	1-215-427-91	s	METAL 1.8K 1% 1/6W
R229	1-214-669-71	s	METAL 3.3 1% 1/4W
⚠R230	1-206-652-61	s	METAL 330 5% 2W
R231	1-206-652-61	s	METAL 330 5% 2W
RV201	1-230-667-11	s	VAR, CERMET 500
ST201	1-571-055-71	s	THERMAL SENSOR
⚠T101	1-448-393-11	s	CONVERTER
T102	A-4935-035-A	s	CONVERTER
T103	1-421-819-11	s	CURRENT
T104	1-437-188-11	s	DRIVE
T105	1-437-188-11	s	DRIVE
T106	1-447-938-11	s	CONVERTER

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

UR-21 M2 BOARD

Ref No.	Parts No.	SP	Description			
⚠C151	1-136-185-12	s	FILM	0.22	20%	250V
C152	1-136-185-12	s	FILM	0.22	20%	250V
C154	1-136-185-12	s	FILM	0.22	20%	250V
C155	1-161-742-12	s	CERAMIC	2200PF	20%	400V
C156	1-161-742-12	s	CERAMIC	2200PF	20%	400V
⚠C157	1-161-742-12	s	CERAMIC	2200PF	20%	400V
C158	1-161-742-12	s	CERAMIC	2200PF	20%	400V
C159	1-161-742-12	s	CERAMIC	2200PF	20%	400V
C161	1-136-564-11	s	FILM	1.8	10%	250V
C162	1-136-564-11	s	FILM	1.8	10%	250V
C163	1-161-915-11	s	CERAMIC	1000PF	10%	500V
C164	1-161-915-11	s	CERAMIC	1000PF	10%	500V
⚠C165	1-161-742-12	s	CERAMIC	2200PF	20%	400V
C166	1-161-742-12	s	CERAMIC	2200PF	20%	400V
C167	1-161-742-12	s	CERAMIC	2200PF	20%	400V
C251	1-161-915-11	s	CERAMIC	1000PF	10%	500V
C252	1-161-915-11	s	CERAMIC	1000PF	10%	500V
C253	1-124-556-51	s	ELECT	2200	20%	16V
C254	1-124-555-51	s	ELECT	1000	20%	16V
C255	1-124-923-91	s	ELECT	0.47	20%	100V
C256	1-124-898-51	s	ELECT	4700	20%	16V
C257	1-124-898-51	s	ELECT	4700	20%	16V
C258	1-124-898-51	s	ELECT	4700	20%	16V
C260	1-124-563-51	s	ELECT	2200	20%	25V
C263	1-130-518-91	s	TEREPHTHALATE	0.015	10%	50V
C264	1-130-524-91	s	TEREPHTHALATE	0.047	10%	50V
C265	1-130-524-91	s	TEREPHTHALATE	0.047	10%	50V
C268	1-130-772-21	s	FILM	0.22	10%	63V
C269	1-130-772-21	s	FILM	0.22	10%	63V
C270	1-130-772-21	s	FILM	0.22	10%	63V
⚠CN151	1-564-215-11	o	PIN, 4P			
CN251	1-566-313-11	o	PIN, 7P			
CN252	1-560-893-11	o	PIN, 5P			
CN253	1-560-890-21	o	PIN, 2P			
D151	1-807-907-11	s	KB088JLM			
D153	1-807-913-21	s	11EQS04			
D154	1-807-913-21	s	11EQS04			
D251	1-807-909-11	s	F10P201			
D252	1-807-921-11	s	FMG-34S			
D253	1-807-911-21	s	F10P40FR			
D254	8-719-109-97	s	RD6.8ES-B2			
D255	8-719-912-00	s	1SS120			
D256	8-719-912-00	s	1SS120			
D257	8-719-200-01	s	10E-1			
D258	8-719-911-19	s	1SS119			
D260	8-719-912-20	s	1SS120			

Ref No.	Parts No.	SP	Description			
⚠F151	1-532-604-21	s	FUSE, 250V 0.3A			
FB251	1-543-060-11	s				
FB252	1-543-060-11	s				
FB253	1-543-060-11	s				
FB254	1-543-060-11	s				
FB255	1-543-060-11	s				
FB256	1-543-060-11	s				
IC251	8-759-007-33	s	TL431CLP(TI)			
⚠L151	1-421-590-11	s	LINE FILTER			
L152	1-421-978-11	s	LINE FILTER			
L251	A-4935-039-A	s	CHOKE			
L252	1-421-459-21	s	CHOKE			
L253	1-421-734-11	s	CHOKE			
L254	1-408-322-11	s	CHOKE			
L255	1-421-459-21	s	CHOKE			
L512	1-421-978-11	s	LINE FILTER			
Q151	1-807-858-11	s	IREP451			
Q152	1-807-858-11	s	IREP451			
Q153	8-729-113-32	s	2SB733			
Q154	8-729-113-32	s	2SB733			
Q251	8-729-178-54	s	2SC2785			
Q252	1-807-195-11	s	2SC3692			
Q253	8-729-178-54	s	2SC2785			
⚠R151	1-202-727-11	s	SOLID	4.7M	10%	1/2W
R152	1-205-915-11	s	WIREWOUND	4.7	10%	7W
R153	1-205-915-11	s	WIREWOUND	4.7	10%	7W
R154	1-247-692-51	s	CARBON	22	5%	1/4W
R155	1-247-692-51	s	CARBON	22	5%	1/4W
R156	1-247-831-91	s	CARBON	1K	5%	1/4W
R157	1-247-831-91	s	CARBON	1K	5%	1/4W
⚠R158	1-205-652-11	s	CEMENT	68	5%	5W
R251	1-205-622-11	s	CEMENT	33	5%	5W
R252	1-247-835-91	s	CARBON	1.5K	5%	1/4W
R253	1-247-855-91	s	CARBON	10K	5%	1/4W
⚠R254	1-213-135-61	s	FILM	220	5%	1W
R255	1-247-839-91	s	CARBON	2.2K	5%	1/4W
R256	1-247-843-91	s	CARON	3.3K	5%	1/4W
R257	1-247-859-91	s	CARBON	15K	5%	1/4W
R258	1-214-669-71	s	FILM	3.3	1%	1/4W

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Ref No.	Parts No.	SP	Description
⚠R259	1-206-652-61	s	FILM 330 5% 2W
R260	1-206-652-61	s	FILM 330 5% 2W
RV251	1-230-668-11	s	VAR, CERMET 1K
RY151	1-515-662-11	s	POWER
ST251	1-571-055-71	s	THERMAL SENSOR
⚠T151	A-4935-036-A	s	CONVERTER
T152	1-421-819-11	s	CURRENT
T153	1-437-188-11	s	DRIVE
T154	1-437-188-11	s	DRIVE

Ref No.	Parts No.	SP	Description
FRAME			
	A-6709-634-A	s	HEAD DRUM ASS'Y DUH-45A-R
	A-6709-636-A	s	UPPER DRUM ASS'Y DUR-45-R
	1-559-298-11	o	CABLE, FLAT 10P (KY-144A to SY-102B)
CN914	1-562-227-41	s	RECEPTACLE, BNC "REF VIDEO IN (EXT SYNC IN)"
CN915	1-562-227-41	s	RECEPTACLE, BNC "REF VIDEO IN (EXT SYNC IN)"
CN916	1-562-227-21	s	RECEPTACLE, BNC "SC IN"
CN917	1-561-577-21	s	8P(DIP TYPE) "MONITOR"
CN919	1-561-045-00	s	7P(M) "DUB OUT"
CN920	1-562-227-41	s	RECEPTACLE, BNC "VIDEO OUT 1"
CN921	1-562-227-41	s	RECEPTACLE, BNC "VIDEO OUT 2"
CN922	1-562-227-21	s	RECEPTACLE, BNC "MONITOR VIDEO"
CN923	1-562-227-21	s	RECEPTACLE, BNC "REF VIDEO OUT"
CN924	1-562-227-21	s	RECEPTACLE, BNC "RF (OFF TAPE)"
CN926	1-562-227-41	s	RECEPTACLE, BNC "TIME CODE OUT"
CN929	1-563-029-21	s	RECEPTACLE, XLR,3P(F) "AUDIO OUT CH-1/L" (J)
	1-563-030-21	s	RECEPTACLE, XLR,3P(M) "AUDIO OUT CH-1/L" (UC)
CN930	1-563-029-21	s	RECEPTACLE, XLR,3P(F) "AUDIO OUT CH-2/R" (J)
	1-563-030-21	s	RECEPTACLE, XLR,3P(M) "AUDIO OUT CH-2/R" (UC)
CN931	1-563-029-21	s	RECEPTACLE, XLR,3P(F) "AUDIO OUT MONITOR" (J)
	1-563-030-21	s	RECEPTACLE, XLR,3P(M) "AUDIO OUT MONITOR" (UC)
⚠CN932	1-509-547-11	s	AC INLET "AC IN"
CN934	1-560-769-00	s	15P,PLUG "TBC REMOTE"
⚠F1	1-532-746-11	s	FUSE, GLASS TUBE 4A
H1002	8-825-578-31	s	ACE,EPS264-5803A "CTL"
H1004	8-825-771-31	s	PP295-58 "TIME CODE"
J1	1-507-553-00	s	JACK "HEADPHONES"

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

Ref No.	Parts No.	SP	Description
M1001	8-835-258-02	s	DC,BHF-1915B "CAPSTAN"
M1002	8-835-255-01	s	DC,R432278181A "T-REEL"
M1003	8-835-255-01	s	DC,R432278181A "S-REEL"
M1004	8-835-055-01	s	DC,DNR-4700A "LOADING"
M1005	8-835-179-01	s	DC,MCB2B-15 "CASSETTE COMPARTMENT"
M1006	1-541-524-11	s	DC "FAN"
ME1001	1-520-393-00	s	"AUDIO CH-1"
ME1002	1-520-393-00	s	"AUDIO CH-2"
ME1003	1-520-500-11	s	"VIDEO/RF"
⚠PM1001	1-454-417-31	s	12V 12/90ohm "S-BRAKE"
PM1002	1-454-417-31	s	12V 12/90ohm "T-BRAKE"
PM1003	1-454-416-31	s	12V 7/35ohm "PINCH"
⚠S901	1-570-117-11	s	ROCKER "POWER"

18-4. PACKING MATERIAL AND ACCESSORIES (SUPPLIED)

Part No.	SP	Description
A-6729-494-A	s	EXTENSION BOARD, EX-127
A-6729-495-A	s	EXTENSION BOARD, EX-128
⚠1-556-760-00	s	CORD, POWER (3 CORE)
1-555-873-13	s	CABLE, REMOTE CONTROL 9P
3-688-884-01	o	CUSHION, UPPER
3-688-885-01	o	CUSHION, LOWER
3-701-625-00	s	BAG, POLY (FOR EX-127)
3-701-632-00	s	BAG, POLY (FOR MANUAL)
3-701-634-00	s	BAG, POLY (FOR EX-128)
3-701-649-00	s	BAG, POLY (FOR VTR)
3-721-446-01	o	INDIVIDUAL CARTON
3-718-784-01	o	SLEEVE
3-718-785-01	o	SPACER

18-5. FIXTURE (OPTION)

Part No.	SP	Description
J-6001-820-A	o	DRUM ECCENTRICITY GAUGE (3)
J-6001-830-A	o	DRUM ECCENTRICITY GAUGE (2)
J-6001-840-A	o	Drum ECCENTRICITY GAUGE (1)
J-6001-930-A	o	Drum ECCENTRICUTY GAUGE (4)
J-6009-830-A	o	FLATNESS PLATE
J-6026-240-A	o	ADJUSTMENT dRIVER
J-6130-010-A	o	REEL TABLE HEIGHT CHECK BASE JIG
J-6130-020-A	o	REEL TABLE HEIGHT CHECK JIG
J-6150-140-A	o	ECCENTRIC SCREWDRIVER (6 MM DIA.)
J-6153-020-A	o	DIHEDRAL ADJUSTMENT SCREWDRIVER
J-6153-720-A	o	REEL MOTOR SHAFT SLANTNESS ADJUSTMENT JIG
J-6153-730-A	o	HEXAGONAL SCREWDRIVER (1.27 MM)
Y-2031-001-0	o	CLEANING FLUID
2-034-697-00	o	CLEANING PIECE
3-702-390-01	o	ECCENTRIC SCREWDRIVER (4 MM DIA.)
3-702-391-01	o	ECCENTRIC SCREWDRIVER (5 MM DIA.)
7-700-736-01	o	L-SHAPEd HEXAGONAL WRENCH (1.27 mm)
7-700-736-05	o	L-SHAPED HESAGONAL WRENCH (1.5 MM)
7-723-902-00	o	DENTAL MIRROR
7-732-050-30	o	TENSION SCALE (100G FULL SCALE)
7-732-050-40	o	TENSION SCALE (200G FULL SCALE)
8-960-015-16	o	ALIGNMENT TAPE, RR5-4SB
8-960-037-02	o	ALIGNMENT TAPE, RR2-1SD
8-960-037-80	o	ALIGNMENT TAPE, RR5-1SD
8-899-999-53	o	TORQUE MEASURMENTt TAPE (100 MM DIA.)
9-911-053-00	o	THICKNESS GAUGE
Standard Products		HEAD DEMAGNETIZER, HE-4

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BVU-900(J/UC)
3-721-445-01 Vol-2

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